

WESTERN JOURNAL OF EDUCATION

IS THE UNION OF THE CHICAGO TEACHER AND THE MINNESOTA TEACHER.

VOLUME III, No. 7, of Chicago Teacher JULY, 1875.

NEW SERIES, Vol. I, No. 1.

WESTERN JOURNAL OF EDUCATION.

J. W. BROWN, Editor and Publisher.

196 and 198 Clark Street, Chicago.

U. T. CURRAN and H. H. BELFIELD, Associate Editors.

PUBLISHED MONTHLY AT \$1.50 A YEAR, INVARIABLY IN ADVANCE.

CLUB RATES:—Three copies, each, \$1.35. Six copies, each, \$1.25.
Ten copies, each, \$1.20.

Remittances may be made by Draft or Post Office Order.

EDITORIAL.

WESTERN JOURNAL OF EDUCATION.

The consolidation of *The Minnesota Teacher* with *THE CHICAGO TEACHER* made it apparent that the title of the latter should be changed to one less local in its character and better adapted to the work the consolidated journal would be expected and required to do. Then, a number of titles were suggested and considered, and it was found that often there is much more than appears to be, in a name.

The title, "WESTERN JOURNAL OF EDUCATION," embraces every grade of instruction from the lowest primary to the highest attained by man, and therefore, received the preference over all others. It clearly indicates what the character of the journal is to be, *provided* it receives the confidence, respect and support of the friends of each of the respective grades of education promoted in the West. It will have no special educational hobbies to ride but will continually favor educational progress. To this end, it will be open to a proper presentation of any question that has an educational bearing and will neglect no matter that is vital to the integrity and elevation of the profession of teaching. Believing the perpetuity of popular government, in a great part, depends on the virtue and intelligence of the people, it will give strict attention to the drift of educational thoughts; to the results of educational effort, and to the effect of public measures on popular education. In furtherance of this object it will gather from every legitimate source, opinions and theories advanced by those who are devoted to the work of education, and it will have pleasure in receiving and publishing their articles on educational subjects. In

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devoting itself to the general promotion of the interests of education it does not cut loose from its local hold, nor will it fail to support the Chicago public school system any less efficiently than did *THE CHICAGO TEACHER*.

It has an *ideal* concerning all educational interests, and it will work for its realization by every grade of school in the land.

On this declaration of its principles and objects it will stand; and that it may be successful in all it has undertaken it respectfully and earnestly solicits the advice and support of teachers and school-officers everywhere, and of all others who are interested in the success of public education and in the perpetuity of free government.

SECTARIANISM vs. THE COMMON SCHOOL.

The political arena of the State of Ohio has been the cynosure to which the attention of the friends of public schools has been attracted. The Republican party, claiming to be the peculiar patron and foster-father of public instruction, met in convention and adopted a platform fully committing itself in favor of the American idea, that the security of the State depends upon the virtue and intelligence of the people. The organs of the Roman Catholic church openly proclaimed an "alliance" with the Democratic party: but thanks to the steadfast purity of the *country* delegations to the Democratic nominating convention, the proffered partnership was not effected. The friends of popular education have reason to be thankful that both the great parties in Ohio have announced themselves without reserve against a division of the school fund, and in favor of the schools.

The anxiety of school men was very great; the press was full of recriminations, and all who have the welfare of the country at heart were carefully watching every

move on the political chess board. Happily the ghost which disturbed their fancy has vanished into thin air. Have we any assurance that this uneasy spirit will not continually rise before us? Standing ever ready are the Catholic bishops, who have almost unlimited control of the vote of the Catholic people on questions affecting the welfare of the church. They thus become a third party in politics, in many cases holding the *balance* of power. The virtue of politicians on either side is not of that heroic character which will enable them to refuse the help of a powerful party, when the prospect of defeat is staring them in the face. In view of this state of things it becomes the urgent duty of school men to look well to the work committed to their hands. If, as we believe, they have in trust the vital interests of this great people, they should see that every seam of their armor is well closed. The double attack made upon the schools is that they are "godless," inasmuch as they are not under ecclesiastical control; and that they are sectarian because unanointed men attempt a *form* of worship, and use a bible which is within the "Anathema."

Our defense against the first attack is that, although we should do *all* things for the glory of God, yet there is a marked line of distinction between the *ordinary* acts of daily life, and *formal* acts of religious worship. An act of religious worship, as such, presupposes a concentration of the thoughts of the heart upon God, and his attributes. The act of adding a column of figures requires the close attention of the accountant and excludes every thought. This latter act if well done cannot be considered as having any moral character, except upon the theory which approves itself only to the theological mind, that the *good* act of the sinner cannot be righteous because an evil tree cannot produce good fruit. That twice two is four is a truth which is neither "godless," nor godly. Selling dry goods, managing a bank, practicing medicine, keeping school, breaking stone upon the highway, are not formal acts of worship, and are not "godless" because *not* done as a part of church work.

There is then a field of action in which the sinner and the saint can work together. Teaching school, if unaccompanied by acts of religious worship, is purely a secular calling. The parent and the church are held responsible for the *religious* training of the children. In the schools those great principles of morality and virtue which are the common property of the Christian world can be taught by example and by principle without offending the conscience of the most scrupulous adherent of the dogmas of any sect. The school should be relieved from any element which contravenes the rights or religious principles of the people. Much as we love the name of our Savior we would not take advantage of political machinery to advance the interests of His kingdom. He addressed the individual by means of the instrumentality called the church; no appeal was made to a political organization, as such; it would seem that his example can be followed without danger. In case the schools were rendered devoid of any *formal* act of religious worship, the charge of sectarian schools would be abandoned. Let us first be just to all, and then we can defend our ground without difficulty.

THE New York State Teachers' Association will meet at Fredonia on the 27th-29th insts.

PESTALOZZI.*

While the name of the Swiss Educational reformer is familiar to teachers throughout the land, few, comparatively, are acquainted with his life labors and with the principles which he advocated and which have rendered him famous. The enterprising Cincinnati publishing house here affords us all an opportunity to understand the *locus* of this remarkable man.

Perhaps that which impresses us most in the character of Pestalozzi is his *simplicity*, his total lack of worldly wisdom. "He passed among his school-fellows as 'green,' and received the nickname 'Henry Queer, of Folleyville.'" He was the butt of practical jokes and the dupe of cunning schemes while a boy, and this confiding nature never deserted him during his long life of eighty years. When offering his hand to a lady of his choice, he bewails his failings, and calls upon her to "reflect well, and decide whether you can give your heart to a man with these qualities;" but adds, in the sublimity of his honesty, "My conscience would have called me a traitor, not a lover, if I had withheld from you any fact that might cause you future anxiety, or render you miserable."

Like others who have been possessed with a single absorbing idea, he was frequently so absent-minded as to be utterly unconscious of surrounding circumstances. It is related that once during a pelting rain, he went to see a friend who lived at a considerable distance. Although he had an umbrella, he was so absorbed in thought that he forgot to open it. When his friend saw him approaching, dripping wet, with his umbrella under his arm, he exclaimed: "Why did you not open your umbrella? Did you not see it rain?" "You are right," said Pestalozzi, spreading his umbrella. "Oh," said his friend, "this will be of little use, now that you are under shelter." "You are right," said the philosopher, as he again shut the umbrella and entered the house.

Another characteristic of Pestalozzi was his humanity. He lived for his race. He sacrificed himself for the poor. Meeting a beggar, one day, he gave him the silver buckles from his shoes, making wisps of straw serve himself. He would give up his own bed to a tired stranger, and sleep upon a bench in his school-room. No pupil was refused admittance to his school on account of his poverty.

With such traits, and with a total lack of all business capacity, it is not surprising that his schemes all failed; failed, that is, as business ventures, though some of them were successful in demonstrating the truth of his ideas. He first established a manual labor school at Neuhof, attempting to combine farming with a school for poor children. This failed, having absorbed all his wife's fortune. When the French laid waste the canton of Unterwalden, and burned Stanz, Pestalozzi opened a school in Stanz for eighty orphan children, and for nearly a year fed and trained them. It was providential, perhaps, that the French returned and took the Convent in which Pestalozzi was teaching for a hospital, since his work would

* PESTALOZZI: HIS LIFE, WORK, AND INFLUENCE. By Hermann Krusi, A. M., Son of Pestalozzi's first Associate, instructor in Philosophy of Education at the Oswego Normal and Training School. Wilson, Hinkle & Co., Cincinnati and New York.

probably have killed him had he continued it. He afterwards opened a school at Burdorf, but was compelled to move it to Hofwyl. But he soon removed it to Yverdun, where he taught for twenty years, and at length, upon the breaking up of this institution, the old man, then in his eightieth year, returned to Neuhof.

Pestalozzi wrote about forty volumes, the most celebrated of which is his "Leonard and Gertrude," in which he not only advanced correct principles of Education, but showed the importance of home training, and the evil effects of dissipation. It is difficult for us, living in the educational light of the present day, to recognize the greatness of Pestalozzi's work, because we cannot picture to ourselves the condition of the schools for the common people in his time. The principles which he labored to enforce are familiar to us because of him; they were not known when he opened his school at Neuhof. But their correctness was at once recognized. Teachers were sent to him for instruction from most of the countries of Europe. Prussia adopted the Pestalozzian system. Other German governments followed. The education systems of Austria, France and Belgium were modified by its influence. England has felt its effects, and our own country is largely indebted to the ideas of the Swiss Reformer.

The volume of Prof. Krusi contains sketches of the associates of Pestalozzi,—Krusi, Niederer, Tobler, Russ, Ramsauer, Schmid and Steiner. It is written with a loving hand.

TALENT VERSUS HARD WORK.

"He is very talented," is the questionable English which greeted our ears on taking charge of a new school. Subsequent investigation showed that the school had been conducted on the "talent" principle.

A modest inquiry addressed to a delinquent, revealed the fact that he had no talent for "rithmetic" and that he was good in "jography and spellin'."

It was a part of the creed of this community that what a child had no "talent" for he could not learn. One or two boys had a talent for writing, the rest developed an astonishing aptitude for blotting and scribbling. None were found who had a talent for the multiplication table.

A few weeks of vigorous practice of teaching with the theory omitted, sufficed to stifle the aspirations of "the talented," and to substitute hard work in their place. Our labors proved an Upas tree to this hypothetical genius. True genius unhindered will accomplish its own success; but it is a commodity of such rarity that it cannot be depended upon as a staple.

Nature has cast most men in the common mold, and but seldom mixes the metal so that the product has the ring of true genius.

One genius produces enough thought to employ a generation of common workers in its practical application. The world needs intelligent artisans to execute the behests of the "gifted."

The public schools should transmit habits of industry as an heirloom to the youth of the land. A course of training beginning at the tender age of six, when the mental and physical being are in plastic condition, should, al-

most without exception, fix a habit of continuous effort. This is an education in itself. Intelligence is acquired only by *experience*. The pupil who "works his sum" and finds he has the right answer, gives no further thought to the matter, but should he not be so fortunate, immediate inquiry is instituted to find out "what is the matter;" this leads to thought and a habit of *fixing the attention*.

This will be found hard work, but it is the great end and aim of all educational effort. The amount of real practical information obtained in a course of school instruction is very small, but very many persons, however, in their after lives, get little additional knowledge of the subjects taught; therefore this modicum of learning must not be despised, but should be made the most of. The chief object should not be lost sight of or the teacher will find himself cramming with facts.

The acquisition of facts is entirely subsidiary; the process of acquiring the facts is the most important point. If a fact is learned by *memory*, we will not affirm that it is not valuable; but if a fact is developed by a process of reasoning, and then fixed in the memory as a result of the effort to perform the logical analysis necessary to its acquisition, the exercise is educational in the highest sense; it does not develop mind, but only affords mind an opportunity of exercising its powers. The conclusion of this matter then is that talent is a plant of such vigorous growth, that it will outgrow and dwarf everything about it, that it does not need the culture of the teacher, but will care for itself, that the work of the teacher is to be directed toward *creating* habits of mental industry, and of *exercising* the mind in every direction; using as a means of this culture the *right* acquisition of practical knowledge and that the average mind should receive the greater degree of attention.

BREAK RANKS, MARCH!

Fellow teachers, the battle of the year is over; our ensign is folded; our arms are stacked, and the command is, *Break ranks, march!* The open fields, the clear sky, the smiling waters, and the cool shades, made vocal by the humming of birds, invite us. Let us be Nature's guests. As a plant lays up its store of heat and light only in the presence of the sunlight, is watered by the dews of heaven, so can we lay up a store of physical force and vigor, which will furnish food for the intellectual fires which promise to consume us during the next school year. Are you weary and worn? Have the lines of care been written deep on your furrowed brow and pale cheek? Let no book entice, no mental labor enslave you; let nature smooth out the careworn furrows with her soothing hand, and paint your cheeks anew with brown and ruddy health. If you are an old *experienced* teacher, let not the enticing circular of the county institute ensnare you. Rest is what you need, not knowledge. Dyspepsia and nervous debility are lying in wait for you. Fresh air and sunshine are heaven's antidote; they are your shield and armor of defense. Go to the woods, the lakes and rivers; wander through the lanes and meadows. Health is also lying in ambush for you. You will find it under the stones of the brook, in the recesses of the forest, in the opening buds, and in the sweet busy idleness which amuses while it cures.

AWARDS FOR SCHOLARSHIP.

The practice of bestowing awards on the basis of scholarship for a term of months, or on competitive examinations, seems to have gained a firm foothold both in colleges and in public schools. Boston grants her Franklin, Chicago her Foster, and Quincy her Morgan, medals; and other cities and towns recognize successful study in similar ways. But in our judgment the wisest course is shown in the St. Louis schools, where scholarships in Washington and Cornell Universities are awarded to the most deserving graduates of the High School. Many a poor boy pines for a deeper draught of the waters of which the common schools can give him but a taste, to whom a scholarship in some college or scientific school, especially if it provided, wholly or partially, the means of subsistence, would be a blessing received with the devoutest gratitude. Many a talented youth is compelled to abandon the prosecution of his studies by the stern command of poverty, for whose education the pittance of a few hundred dollars per year for five years would be an investment yielding untold per cent. We suppose that in this liberty-loving land of ours the appointment of an official to select worthy youth for education at the expense of the state or the nation, would be regarded as a sure indication of approaching ruin. It would smack too strongly of "paternalism," although the exercise of a healthy *paternalism* is what the youth of our country need more than anything else. Perhaps this would be unwise; but there is a very wise way of spending money which we would like to suggest to our wealthy men and women. Not the founding of more colleges; but the support at those already founded of young men and boys who are worthy of being educated, and whose education the country needs. Let our teachers be requested to report such cases, with the understanding that they will be provided for. And our colleges, seeking a closer connection with our public schools, may here find it. Offer your scholarships as prizes in our High Schools; you cannot invest your money half so well in any other way.

THE OHIO TEACHERS' EDUCATIONAL ASSOCIATION met at Put-in-Bay Island, on June 30th and 31st. It was estimated that at least a thousand teachers were in attendance. The papers and discussions were of marked ability. The subject of the Centennial exhibition received special attention. It was resolved to exhibit a complete historical record of state and local educational effort and progress, together with an analysis of the development of school systems, sketches of the history of colleges and higher schools, graphic illustrations of school statistics, *school work* comprising examinations in Arithmetic, English Grammar, English Composition, Geography, Natural Science, Music, Writing, Drawing, High School branches, and models of school buildings, including the log palace of the ancient pedagogue and the more pretentious structures of the larger cities. The preparation of examination papers is to be conducted in accordance with rules prepared by the state school commissioner and a committee of experienced teachers. All papers are to be certified as having been prepared in accordance with these rules.

EXAMINATION QUESTIONS.

We publish the questions used in the late examination of applicants for admission to the Chicago High School. Of the four-hundred and ninety odd pupils sent by the principals of the district schools of the city, only six failed to reach the average of 70 per cent. The questions must have given general satisfaction, one would think, though we have heard some of the pupils complain that the "Language" was not sufficiently difficult. And we think it probable that a higher per cent. would have been secured by a more thorough set of questions in technical grammar, in which we are firm believers. Some of the good spellers too, were disappointed in having no opportunity to display their skill, though we think it probable that to a greater number the absence of a set of difficult words was a cause of joy rather than grief. It is a query, however, whether this omission may not affect the teaching of spelling next year.

DRAWING IN THE CHICAGO SCHOOLS.

The close of the school year afforded an opportunity for the display of the two "accomplishments" taught in the Chicago schools,—Music and Drawing. The blackboards were profusely decorated with specimens of the pupils' skill in handling the crayon, and in several schools pencil drawings were suspended upon the walls. To the intelligent observer Drawing, as taught in Chicago, is not a mere accomplishment: it is an educational force which is making itself felt in the training of the eye and hand, and in the development of the æsthetic sense. The readiness and skill with which pupils even in primary grades produce beautiful and novel designs is astonishing. The day is not far distant when the value of this work will be felt.

A NOVEL school-exposition was given in the town-hall at Bedford Indiana, last month, which a correspondent of the Louisville *Courier-Journal* describes, as follows:

The hall was tastefully trimmed, decorated and bespangled with flowers and evergreens. Forty-four pictures, done in crayon and India-ink, and ten portraits, enlarged from album-sized photographs all the work of the pupils of the school, hung on the walls. The execution for children was admirable and evinced real talent. About two hundred and fifty maps of the respective countries, finely executed in pencil, also adorned the walls. But the prettiest sight of all were the botanical specimens. There were about six hundred of these comprising the flora of this locality. Classifications of geography and physiology were gracefully festooned across the hall; essays from the third grade upward to the senior class were suspended with pink and blue ribbons. Each of the lower grades was represented by a display of slates on which were written grammar, arithmetic and spelling exercises. Seventeen geological cabinets, composed of rarest specimens found in this country occupied places on the main floor. It was an attractive and a most interesting scene.

And doubtless did more in a few hours than otherwise could have been done in months to increase the zeal of the many men and women who were present in behalf of public schools. We will guarantee that where such work is performed the school-room is never dull or irksome but ever bright and cheerful and that corporal punishment is unknown because it is never necessary to inflict it.

HON. TAPPAN WENTWORTH of Lowell has bequeathed to Dartmouth College \$175,000.

CHICAGO SCHOOL SALARIES.

At a meeting of the Board of Education on the 7th inst., the following schedule of salaries for the ensuing year was adopted:

Officers of the Board.—Clerk, \$2,500; Building and Supply Agent, \$2,500; Attorney of the Board, \$2,500; Assistant Clerk, \$1,000; School Agent, \$600; Messenger, \$700.

Superintendents.—Superintendent of Schools, \$4,000; Assistant Superintendent, \$2,500; Superintendent of Music, \$2,000; Superintendent of Drawing, \$2,000; Superintendent of German, \$1,600.

Teachers.—Principal of High School, \$3,000; Principal of Normal School, \$2,500; Principal of Division High School, \$2,500; head of Department of Ancient Languages, \$2,350; head of Department of Mathematics, \$2,350; head of Department of Natural Science, \$2,350; head of Department of History and English Literature, \$2,200; head assistant of Normal School, \$1,250.

Assistants in High and Division High Schools.—For the first year, \$1,000; second year, \$1,100; third year, \$1,200; fourth year, \$1,300; fifth year, \$1,400; sixth year, and subsequently \$1,500; assistants in Normal School, \$1,000 a year each.

Principals of Grammar Schools.—Twelve-room buildings and over, for first year, \$1,200; second year, \$1,400; third year, \$1,600; fourth year and subsequently, \$1,800. Sixteen-room buildings and over, first year, \$1,400; second year, \$1,600; third year, \$1,800; fourth year and subsequently, \$2,000. Twenty-room buildings and over, first year, \$1,600; second year, \$1,800; third year, \$2,000; fourth year and subsequently \$2,200.

Principals of Primary Schools.—Eight-room buildings and under, \$800; ten-room buildings \$1,000; twelve-room buildings, \$1,200.

Head assistants in grammar schools, first year \$900; second year, \$950; third year, \$1,000. Other assistants in grammar and primary schools on trial, not to exceed fourteen weeks, \$10 per week; after appointment, first year, \$550; second year, \$650; third year, \$750; fourth year, \$750. Assistant teachers of experience and ability shall be entitled to the full salary of the first year from the date of engagement on recommendation of the Committee on Appointment of Teachers and the Superintendent, the Board reserving to itself the right also to retain any teacher longer than one year upon any grade of salary if there appears to be no benefit from experience, as well as to advance any teachers of experience more rapidly if such advance meet the approval of a majority of the Committee on the Appointment of Teachers and the Superintendent.

Just discrimination in salaries always is proper. No one can reasonably object to having his ability, experience and efficiency duly considered in determining what compensation he shall receive for his services as school officer or teacher. The action of the board, as above reported, indicates that its policy now is to regulate salaries so that all hereafter in its employ may feel they are to be rewarded according to their merits, and may know, if they give no evidence of deserving it, they are not to expect an increase of compensation nor promotion to higher grades. The unfortunate part in the schedule for the ensuing year is the reduction of the salaries of a number of the ablest, most experienced and efficient of the teachers. It would have been far better not to have done this, but to have required of them greater service. Especially is this true concerning the principals so affected. The writer's experience as Superintendent of Public Schools has taught him that there is no economy in reducing salaries, for the service rendered is almost sure to be in accordance with the compensation, and, there is no good reason for expecting or requiring it to be otherwise. The *esprit de corps* is not to be kept up by disparagements and discouragements

but by ample present reward and a hope of something still better. We are satisfied this is what the Board designs to, but does not in all cases afford.

Good pay, well earned should be the rule. In other words Model Teachers should receive Model Salaries, as they now do in Quincy, Illinois.

AN Ohio clergyman thinks examiners should pay attention to "the particular natural innate adaptedness of the teacher for the profession," as well as to "the intellectual requirement," and insists that because they do not. "Men and women are found at the head of our schools who are no more able to develop the human mind than a Modoc is to draw a picture of the heavenly Jerusalem with charcoal." Would it not be well to also insist that examiners shall be able to distinguish the difference between aptness and inaptness to teach and govern, as well as discern who can parrot off the requisite intellectual formulæ, before they are entrusted with authority to grant or refuse certificates? The fact is there ought to be an examiner of examiners. Then there would be some hope of eradicating the evil complained of.

THE fifth annual commencement of Wooster University June 30th ult., was attended by many from near and from far. All the exercises were highly creditable and interesting. This institution has taken its stand among the first of American colleges and has solved the problem of the feasibility of the co-education of the sexes. Of the class of twenty-two, two are young women, who have taken a full classical course, received their diplomas and corresponding degrees and gone out with double honor. Two other young ladies graduated in the scientific course. This is an achievement of which the young ladies may well feel proud especially as it has been accomplished in the face of an unfavorable public opinion. While others congratulate the winners of the University boat race we will praise these ladies.

DURING the late commencement week at Monmouth College a Professorship of Philosophy was established in that institution. It is to embrace Metaphysics, Logic, Political Economy and Constitution of the United States and is intended to meet an important want in a student's course. Rev. D. MACDILL D. D. of Cherry Fork, Ohio, was unanimously chosen to fill the position. He has long directed his attention especially to philosophic studies, and has written works of rare merit. It is hoped he will accept the office and thus confer lasting honor on the institution.

THE Board of Education of the city of Brooklyn have voted to introduce into that city "The plan which has worked good results in other cities, to make all the school books free and a part of the school property." Are the grounds, buildings, blackboards, desks and apparatus free? Then, surely the text-books should be free. The rule will work everywhere as soon as the people come to understand its reasonableness and advantages.

It is probably that the Hon. E. E. WHITE of Ohio, editor of the *National Teacher* will be elected to the Presidency of the State University of Indiana. We know of no one who could better fill that position.

THE University Boat Race resulted in a victory for Cornell.

EDUCATIONAL journalism appears not to be popular with, nor profitable to a number of those who are engaged in it, and hence they are inclined to doubt that *The New England Journal of Education*, this Journal, or any other devoted to general educational work can achieve success. We do not, and cannot approve their short-sighted inferences, nor give currency to their assertions that the mass of those engaged in teaching will not patronize an educational journal. THE CHICAGO TEACHER paid its way and a profit to its publisher from the day it was started to the day it was merged into this journal and there is no good reason why others may not do as well or even better.

A COMMITTEE of the Detroit Board of Education very properly says:

A teacher of long experience in our schools should be a valuable public servant, and should be recognized and paid as such. We should encourage teachers to regard our schools as their own schools and our educational work as their life-work.

To emphasize and practically exemplify this principle of dealing with teachers, the Board agrees to re-appoint the best teachers for life or during good behavior and recognizes experience by adding to the original salary fifty dollars a year for each year of service during eleven years.

CIVIL Government is taught in the Quincy (Ill.) grammar schools. At the recent examinations therein the members of Miss SUSIE J. DUNN's class distinguished themselves by evincing their familiarity with the Constitution and its amendments, the powers of the different high functionaries, the duties of the Legislature and Congress. As we were the first to recommend the introduction of that branch of study into those schools we naturally feel some pride in the success which is attending it.

DR. MOSS has been removed from the Presidency of the University of Chicago and Dr. Burroughs has been re-instated therein. This is said to be the result of a motion instigated by Dr. Moss to remove Dr. BURROUGHS from the office of Chancellor. Such action on his part, was a violation of good faith as to the terms of his appointment, which merited and received the disapproval of a majority of the Board of Trustees, and made it necessary that he should retire from the Institution.

At Shaw University, located at Holly Springs, Miss., the students are colored and boys of twelve years fluently read Caesar and Xenophon, while those of fifteen and sixteen readily and clearly demonstrate problems in algebra and geometry. The examinations and commencement exercises of this institution passed off in a manner creditable to both professors and students.

THE third annual meeting of the Wisconsin Institute Conductors will be held at Eau Claire, on the 26-28th insts., and will be under the direction of Prof. ROBERT GRAHAM. The programme is well-devised, and the exercises will afford superintendents and others an excellent opportunity to acquire new ideas as to methods, etc.

THE Board of Regents of the Wisconsin State University have awarded a contract for the erection of a new University Science hall to cost \$69,975.

THE recipients of the Foster medals in the Chicago grammar schools, this year, number 52.

THE number of promotions of the Chicago grammar schools to the high school, this year, is 487.

At the recent re-union of the Yale class of 1825 twenty-seven of the thirty-six living members sat down at the class banquet. Forgetting their age and infirmities these men went to the Mecca of their intellectual life there to revive their recollections of a half century ago and to worship at the shrine of their alma mater.

At the same time fifty-two of the ninety-five members of the class of 1865 celebrated their decennial. Some of them are in active business and others in professional life. All enjoyed the occasion.

At the Alumni Dinner, WILLIAM M. EVARTS, alluded to the fact that the two highest judicial offices in the country, the Chief Justice of the United States and Attorney General, are filled by graduates of the same class at college, but was too modest to state that he was filling a place hardly less distinguished and honorable, the leadership of the American bar. This is but one of the many evidences of the worth of American Colleges and of the greatness of their work and influence.

GIRARD COLLEGE, Philadelphia, is educating five hundred and fifty orphans. It has also one hundred and fifty applicants for whom there is no room. Happily there is an annual surplus of \$200,000 over all expenditures, and it is proposed to increase the accommodations of the college so that it may meet all demands upon it.

THE Board of Education of Rochester, N. Y. has adopted a resolution prohibiting all religious exercises of whatever nature in the public schools. And still the party in whose interest this concession was made is not satisfied, and will continue the war against the schools. This is but one more proof of the futility of attempting to amend the public school system to suit its enemies.

THE fifteenth annual meeting of the National Educational Association will be held in Minneapolis, Minn., on the 3d, 4th and 5th days of August proximo. The programme appeared in the last number of THE CHICAGO TEACHER. We urge on all the readers of this journal the importance and pleasure of attending. We know of no excursion that can be made more profitably or happily.

THE Fifth Plank of the platform adopted by the Wisconsin Republican State Convention at Madison, July 7th, 1875, is as follows:

Free education and no division of the school fund for sectarian purposes.

That plank is sound, and it is safe to stand on it.

The same convention nominated Robert Graham, of Oshkosh, for Supt. of Public Instruction.

THE nineteenth anniversary exercises of the Chicago High and Normal Schools were attended by a vast throng of people. There were 105 young lady graduates. The exercises were of a high degree of merit and in every respect worthy of praise.

AN admirably planned system of monthly written examinations is not so new as the *American Journal of Education* seems to think it is, nor is Prof. MASON entitled to the credit of first inventing it. It is an efficient means of classification and government.

It is our purpose to make this journal more than worth its subscription price, and therefore, we will offer few, if any, premiums. Please see our club rates and aid us all you can in obtaining subscriptions.

BENJAMIN RUSSEL CUTTER, for seventeen years Principal of the Washington School of Chicago, died at his residence at Elmhurst, June 15th, and was buried at Graceland on June 17th. Mr. CUTTER took charge of the Washington School when it was in an utterly demoralized condition: but it felt the hand of its master when he stepped within the walls of that old building on Indiana Street. In less than a week there was order where there had been disorder, quiet, steady work where there had been chaos. The Washington School took its place at once in the front rank, where it has since remained.

It is not our intention to attempt a review of Mr. CUTTER's work in this city, but simply to offer a tribute to his memory. He was the oldest Principal in the service. Where the Chicago Schools were known, Mr. CUTTER was known. He impressed his character upon them. Prompt, energetic, persevering, faithful, skillful, he infused his spirit into his co-laborers and pupils. No work was too exhaustive, no sacrifice too painful, if the interests of his own school or of the schools of the city demanded it. He was thoroughly devoted to his life work, and was impatient of any thing that stood in the way of the progress of his pupils.

When the Board resolved to erect a new building, long needed, for the Washington, Mr. CUTTER entered upon the work with his usual zeal. Plans were inspected, schools visited, principals consulted, nothing was left undone to secure the benefit of the experience of others. Many of the conveniences of the new Washington School building are the result of Mr. CUTTER's persistence. He surrendered the keys of that noble edifice with tears; but died as he so long had lived the Principal of the Washington School.

Mr. CUTTER was a warm friend, a genial companion, a tender husband and father. He was a passionate lover of flowers, and skilled in their culture. His talks to the teachers on the care of flowers will always be remembered by those who listened to them. Said a teacher a few days ago: "I never heard any one talk of plants and flowers who seemed to understand them so perfectly. His remarks on this subject were always intensely interesting."

At the meeting of the Chicago Principals' Association, called June 16th, there was a large attendance. Remarks were made by John C. Richberg, Esq., President of the Board of Education, himself a former pupil of Mr. CUTTER: by E. F. Runyan, Esq., ex-President of the Board: by W. H. Wells, Esq., former Superintendent of Schools: by Hon. J. L. Pickard, Superintendent of Schools: by M. Culver, Esq., former Principal of Jones School, and by Principals Merriman and Kirk. Appropriate resolutions were adopted.

The graduating exercises of the High School at Clinton, Iowa, on the 25th ult., were well attended, very creditable and interesting. Immediately after the presentation of the diplomas, Prof. HENRY SABIN delivered an address on "Work and Culture," which we have perused with pleasure and would be glad to copy did space permit.

The twenty-third annual session of the Wisconsin Teachers' Association will be held at Eau Claire, on the 28-30th insts. The programme is excellent. It will be to the advantage of teachers from other States to attend.

PHILLIPS' ACADEMY at Andover, Mass., is now within three years of its centennial.

It is probable the Norwegian Lutherans will found a theological seminary in Chicago.

PROF. HARTT, of Cornell University, has received the appointment of National Geologist of Brazil, at a salary of \$10,000 a year.

THERE is to be a grand educational re-union in the interest of Asbury University, at Indianapolis, on Tuesday Sept. 14th, 1875.

FREEPORT, Ill., is noted for annually contributing a goodly number of students to Universities. This indicates that education is in good demand in that city.

WE desire, for publication in this journal, articles on all grades of educational topics, addresses, reports of educational meetings, items of news etc.

BROWN UNIVERSITY's new library building is to be fire proof, and capable of holding one hundred and forty thousand volumes. It will cost about \$80,000.

AN Industrial School has been established at Sugar Grove about seven miles west of Aurora, Ill., by THOMAS JUDD and Prof. FRANK P. HALL.

ANTIOCH College has a "Joy Fund" for the benefit of poor students. This Institution makes no distinction in the admission of pupils on the ground of sex or color.

EQUALITY OF SALARIES is ably advocated by the *New York School Journal*, on the ground that a certain amount of labor is entitled to a certain amount of pay whether it be done by one who is simply an assistant or a first assistant teacher, and whether in the primary or junior or grammar department. It claims that for all teachers below the grade of principal and vice-principal, there should be equality of wages to all who receive a full certificate or are certified as being *skillful teachers*. It also claims there should be no distinction made on account of the age of the pupils, for they *all* require *good* teachers. There is food for thought in these ideas.

At the late Commencement exercises of the State University of Wisconsin, for the first time in the history of that Institution, several young ladies appeared on the Commencement platform and acquitted themselves worthily. There was sterling and practical thought in their essays, and they read or spoke so that they were clearly heard by the large audience. In the pieces and bearing of both sexes the benefits of co-education appeared.

HON. NEWTON BATEMAN was re-installed President of Knox College at the Opera House in Galesburg, Ill., June 22d, ult., in the presence of a large audience. Prayer was offered by the Rev. Dr. FOOTE of Quincy, Ill. EX-CHIEF JUSTICE LAWRENCE conducted the introductory ceremonies and presented Dr. BATEMAN the keys of the College. The inaugural address and a reception and banquet followed. Dr. BATEMAN's experience as teacher, and as Superintendent of Public Instruction for the State of Illinois, will enable him to discharge the duties of his present office with the highest honor to himself and the best interest of the College. The fact that he is not a D. D., but an L.L. D., should encourage teachers to persevere in their profession and to work hard to merit and attain promotion to the highest places.

CONTRIBUTIONS.

A RETROSPECT.

Tom, do you ever paint the hut
That stood beside the road;
The sunny slope, the purling brook
That through the meadow flowed;
The white oak huge close by the door,
The elms beside the spring,
The graceful vines that hung so low
And formed our rustic swing;
The birds that sped from bough to bough
And sang from morn till eve,
When glad as they, and lingering still
We fondly took our leave?
I see those joyous girls and boys
Who were our playmates then;
Those happy days so long gone by
I live them o'er again.
Tom, now I dread to think of it,
Time hath such changes wrought
Among the laughing children small
That sported at that spot.
Some have grown gray 'neath life's sad load,
And some lie 'neath the sod,
Our hearts are not so warm as when
Those wood-land paths we trod.
Ambition hath made slaves of us,
We've wandered far away
From simple scenes that gayly shone
With morning's brightest ray.
I feel that it is good to look
Backward to that blest place,
To gaze on sinless childhood joys
That time cannot efface.
And when the rapid years are o'er
And all life's changes past,
I pray that all so happy then
May meet in heaven at last.

June 26, 1875.

—J. A. Bartley.

HORACE MANN.

On receiving his appointment as Secretary of the Massachusetts Board of Education in 1837, Mr. Mann at once withdrew from all professional and business engagements whatever, so that no occupation but this might burden his hands or disturb his thoughts. He even disconnected himself from all association with political parties, and during the entire period of his Secretaryship, it is said that he never attended a political caucus meeting or convention of any description. He was determined to be seen and known only as a promoter of education. While he deeply sympathized with all the reforms of the day, he knew how obnoxious they were to large classes of people whom he desired to influence for good; and as he could not do all things at once, he sought to do the *best* things and those which lay in the immediate path of his duty first.

Events soon justified the wisdom of his course. The Board was subsequently assailed most violently by political partisans, by anti-temperance demagogues, and bigots after their kind, and nothing but the utter impossibility of attributing any motive or purpose to its Secretary *but absolute devotion to his duty*, saved it from destruction. It is affirmed by one of Mr. Mann's biographers that during a twelve years' period of service as Secretary, no opponent of the cause, or of his views of conducting it, was ever able to specify a single instance in which he had prostituted or perverted the influence of his office to any personal, partisan or collateral end whatever.

Few labors ever undertaken by man have had relations so numerous, or touched society at so many points, and those so sensitive, as those in which the Secretary was at this time engaged. Says his biographer:

The various religious denominations were *all turned into eyes*, each to watch against encroachments upon itself, or favoritism toward others. Sordid men anticipated the expenditures incident to improvement. Many teachers of private schools foresaw that any change for the better would withdraw patronage from their own; though to their honor be it said that the cause of public education had no better friends than many private teachers proved themselves to be. But hundreds and hundreds of wretchedly poor and incompetent teachers knew full well that the daylight of educational intelligence would be to them what morning dawn is to night birds. Book-makers were jealous of interference in behalf of rivals; and where there were twenty competitors of a kind, Hope was but a fraction of one-twentieth while Fear was a unit.

These and a score of other causes combined, conspired to make Mr. Mann's position one of peculiar embarrassment at that particular time when the cause of educational reform was just in its infancy. There was a spirit of conservatism to be overcome, and more formidable still, the spirit of pride in the then existing condition of the schools, a pride which had been fostered for a century among the people, not because their schools were as good as they should be, but because they were so much better than those of neighboring states. And then, again, this is a cause in which it is impossible to excite any such enthusiasm, since its rewards lie so much in the remote future, as in those where the investment of means may be refunded with usury on the return of each anniversary or quarter day. Questions respecting the education of the whole people *touch* the whole people. Commerce, agriculture, manufactures, transportation are class interests. Each is but a segment of the great social circle. But education is a universal interest. It is a problem which everybody undertakes to solve; hence ten thousand censors rise up in a day. It is an interest not too low to be noticed by the highest, nor too high to be adjudicated upon by the lowest.

Such considerations as these tend to show the multifarious relations of the cause of education to society at large and to the interests, hopes and prejudices of each of its classes, while they suggest the extremely delicate position in which this great pioneer in American Educational Reform was placed. His was the task to superinduce a vigorous system upon a decrepit one; to effect changes in almost absolute laws; to promote the organization of new districts; the building of suitable school houses; the proper classification of pupils; the efficient supervision of the schools; improvement in books and methods of instruction, and to bring about a revolution

in the motives and plans for discipline. He must labor to improve the qualification of teachers; to expose the evils of sub-administration, and devise wiser modes of collecting the statistics.

Mr. Mann, in assuming the duties of his office, availed himself of these three instrumentalities of influencing the public mind: 1 Public Lectures addressed to conventions of teachers and the friends of education held annually in each county of the state. These lectures were adapted to popular and promiscuous audiences and were wonderfully calculated to awaken a lively interest, and enlist parental patriotic and religious motives in behalf of the great work in hand. 2 The report which he was required annually to make to the board of his own labors, and of the condition and wants of the schools under his supervision. In these he presented more detailed expositions of the needs of the cause of education and of the relations that it sustains to the interests of civilization and human progress. 3 In the *Common School Journal*, conducted on his own responsibility, he gave detailed and specific views as to modes and processes of teaching and training together with the best management of schools.

Of the many lectures which he delivered, seven were published in a volume prepared for the press by special request of the Board in 1840. The subjects of these lectures are: I. Means and objects of Common School Education. II. Special Preparation a Pre-requisite to Teaching. III. The Necessity of Education in a Republican Government. IV. What God does and what he leaves for man to do, in the work of Education. V. A Historical view of Education; showing its dignity and its degradation. VI. On District School Libraries. VII. On School Punishment. It has been well remarked that these lectures alone are sufficient to establish for him, or any other man, a permanent reputation as an eloquent writer and profound thinker in this department of literature. None but those who have been privileged to listen to Mr. Mann, can gain any adequate idea of the fascination of his personal presence, or the matchless power of his eloquence.

His annual reports, of which there are twelve, are master pieces of composition both as to matter and style. They are an enduring monument of his well directed zeal as a public officer, and of broad, comprehensive and practical views of educational improvement. If we were to be called upon to suggest the most effective means for inspiring a new departure in educational reform throughout the land, we could think of nothing more potent than the re-publication in popular form, and the universal distribution of some of the leading addresses and the twelve annual reports of Horace Mann. They would prove to be a new birth and new baptism of inspiration to the slumbering, and it is to be feared, the declining popular interest, in that which should be the supreme duty of the American people—the cause of universal education. Not even a synopsis of his reports would be possible within the limits of this brief and imperfect notice of the great Secretary. Such an epitome may be found in the first volume of Barnard's Educational Biography to which the writer is greatly indebted for most of the facts embodied in this imperfect sketch. It covers fifteen finely printed pages, and we cannot resist the temptation to insert here the closing paragraph:

In a brief *Supplementary Report* with his usual thought-

fulness for the welfare of others, he suggests to the Board that his successor will need an office (which he had never had), a clerk, and some compensation for his traveling expenses; and incidentally, though with great modesty, he unveils a part of his own arduous labors. He had *averaged fifteen hours labor per diem*, from the time of taking the office, had never had a day of relaxation, and we may add, what he did not, *had expended more than the half of his salary for the cause of education.*

WINONA, MINN.

—W. F. Phelps.

A PSALM OF SCHOOL DAYS.

Tell me not in voice that sigheth
Grammar's but the pedant's dream,
For the soul is dead that lieth,
Howe'er this to some folks seem.

Grammar's real, grammar's earnest,
And the grave is not its goal;
"Dust thou art, to dust returneth"
Was not spoken of the soul.

Not enjoyment and not sorrow
Is our destined end or way,
But to con that each to-morrow
Finds us farther than to-day.

Art is long, and time is fleeting,
And our hearts, though stout and brave,
Still like muffled drums are beating
Funeral marches to the grave.

In this dreadest field of battle,
In the nurseries of life,
We should not be like the cattle
But be heroes in the strife.

Trust no upstart howe'er pleasant,
Let your grammar still be read,
Act—act—God himself is present
Seeing if you earn your bread!

Lives of great men all remind us
We can make our lives sublime,
And examples leave behind us,
If we Grammar it in time.

Such examples as another
Seeking solid wealth to gain,
Some forlorn, misguided brother,
Seeing shall take heart again.

Up, ye sloths! and duty doing,
Cease your wretched lies to prate,
It is worth even your pursuing,
Get the Grammar in each pate!

—James Avis Bartley.

THE TEACHER.

A Webster saw and owned the teacher's part
In building the great tomb of Tyranny,
Then fashioning the palace where the Right
Only shall reign, because it is the Right.
He only second to the Minister
Who bids him labor next to him on base
And walls, substantial masonry, rock set,
To laugh at envious wind and wave, and stand,
Ay, when this planet flies the solar sphere.

—Jas. A. Bartley.

WILL THEY BE OPENED?

I have knocked at the door of riches,
 And the portal opened wide,
 I have stood upon the threshold
 Of opulence and pride,
 I have gazed within its chambers
 From my unexalted stand,
 But my entrance was prevented
 By an unseen magic wand.

I have e'en approached the portal
 Of the temple men call Fame,
 I have called unto its keeper
 And have given him my name.
 But my call was unregarded,
 While my fellows passed me by,
 And my name was unrecorded
 And I scarce suppressed a sigh.

Honor is another castle
 Through whose gates I've tried to pass,
 And, though years have fled in toiling
 I remain among the mass.
 'Mong the mass of struggling people,
 Toiling that they still may live,
 But among us many others
 Asked what Fortune would not give.

Now, I ask, will Fortune sometime
 Ope to us the iron gates?
 And I hear the answer given,
 Few there be gain these estates.
 "Fame is fickle, wealth uncertain.
 Honor comes to whom deserves
 And to him this meed is granted
 Who his duty best observes.

Idleness wins no true laurels,
 'Tis the worker wears the crown,
 And on him who does his duty
 Justice ne'er bestows a frown.
 Toil among your fellow workers,
 Fill the place designed for you
 And your meed will then be honor,
 Not false fame, but honor true."

— I. Ransom Sanford.

THE CHICAGO TEACHER and the *Minnesota Teacher* are to be consolidated under the title of THE WESTERN JOURNAL OF EDUCATION. If the new paper will be as good as THE CHICAGO TEACHER has been lately, we shall be satisfied. The new move is a good one. Success to it.—*New York School Journal*.

It is intended that "the new paper" shall be better than THE CHICAGO TEACHER was. There are "Wide-Awake" educational people in the West, and, by their help, this JOURNAL will achieve success.

THE *Public School Record* favors "condensation" of educational journals. It believes, if a successful combination of them could be made as has been suggested, "it would afford a fine field for such a journal, and be a great aid to our grand army of teachers." It suggests "that steps be taken to unite, in strong force, all ready and willing hands, for the accomplishment of the enterprise."

SELECTIONS.

THE SOCIAL SCIENCE ASSOCIATION ON EDUCATION AND SCHOOL-HYGIENE.

The session of this association at Detroit, was distinguished for the attention paid to education, and particularly to the hygiene of our public school system. Teachers may feel encouraged that the magnitude and importance of their work is becoming recognized; and grateful that thoughtful minds deem no subject more worthy of examination and discussion. We make no apology for devoting so much space to abstracts of the valuable papers presented, and trust that our readers will find them interesting, suggestive and useful. We quote mainly from the reports given in the *Detroit Tribune*. On Tuesday evening, May 11th, Dr. D. F. Lincoln, of Boston, presented the report of the Health Department, from which we make extracts.

PROJECT OF A LAW—ESTABLISHING THE OFFICE OF MEDICAL INSPECTOR OF SCHOOLS.

First.—He shall be appointed by the head of the Department of Public Instruction.

Second.—Term of office three years.

Third.—Must be a physician.

Fourth.—Is expected to devote his entire time to the duties of his office.

Fifth.—Salary \$3,000, payable quarterly, plus necessary expenses for clerical labor and travel.

Sixth.—He shall take cognizance of the interests of health among the teachers and children of the public schools.

Seventh.—He shall make sanitary investigations in respect to school-houses and grounds, and to all circumstances connected with the management and instruction of the schools which may appear to influence the health of scholars or teachers.

Eighth.—He shall make himself acquainted with the means employed in other States for preserving the health of the inmates of the schools.

Ninth.—He shall seek to trace the origin and mode of extension of epidemic or other diseases among inmates of schools, and to point out measures for the arrest or prevention of such diseases.

Tenth.—He shall from time to time inform the Department of Public Instruction of the results of the aforesaid investigations, and shall suggest to the said department such modifications of the system of instruction and management existing in the schools of this state, as, in his opinion, would conduce to the improvement of the health of teachers and scholars.

Eleventh.—He shall further, in the month of January of every year, present to the Department of Public Instruction a written report of his doings and investigations in the line of his duty, as aforesaid, for the year ending with the 31st of December next preceding.

Twelfth.—He shall gather, and from time to time shall present to the Department, such information in respect to the interests of the public schools as he may deem proper for diffusion among the people.

RULES FOR THE CARE OF THE EYES.

By Dr. D. F. Lincoln, Secretary of the Department of Health, A. S. S. A.

When writing, reading, drawing, sewing, etc., always take care that

- (a.) The room is comfortably cool, and the feet warm;
- (b.) There is nothing tight about the neck;
- (c.) There is plenty of light without dazzling the eyes;
- (d.) The sun does not shine directly on the object we are at work upon;
- (e.) The light does not come from in front; it is best when it comes over the left shoulder;
- (f.) The head is not very much bent over the work.

(g.) The page is nearly perpendicular to the line of sight; that is, that the eye is nearly opposite the middle of the page, for an object held slanting is not seen so clearly.

(h.) That the page, or other object, is not less than fifteen inches from the eye.

Near-sightedness is apt to increase rapidly when a person wears, in reading, the glasses intended to enable him to see distant objects.

In any case when the eyes have any defect, avoid fine needle-work, drawing of fine maps, and all such work, except for very short tasks, not exceeding half an hour each, and in the morning.

Never study or write before breakfast by candle light.

Do not lie down when reading.

If your eyes are aching from fire light, from looking at the snow, from over-work, or other causes, a pair of colored glasses may be advised, to be used for a while. Light blue or greyish blue is the best shade, but these glasses are likely to be abused, and usually are not to be worn except under medical advice. Almost all those persons who continue to wear colored glasses, having perhaps first received advice to wear them from medical men, would be better without them. Traveling vendors of spectacles are not to be trusted; their wares are apt to be recommended as ignorantly and indiscriminately as in the time of the "Vicar of Wakefield."

If you have to hold the pages of *Harper's Magazine* nearer than fifteen inches in order to read it easily, it is probable that you are quite near sighted. If you have to hold it two or three feet away before you see easily, you are probably far-sighted. In either case it is very desirable to consult a physician before getting a pair of glasses, for a *misfit* may permanently injure your eyes.

Never play tricks with the eyes, as squinting or rolling them.

The eyes are often troublesome when the stomach is out of order.

Avoid reading or sewing by twilight or when debilitated by recent illness, especially fever.

Every seamstress ought to have a cutting-out table to place her work on such a plane with reference to the line of vision as to make it possible to exercise a close scrutiny without bending the head or the figure much forward.

Usually, except for aged persons or chronic invalids, the winter temperature in work rooms ought not to exceed 60 deg. To sit with impunity in a room at a lower temperature, some added clothing will be necessary. The feet of a student or seamstress should be kept comfortably warm while tasks are being done. Slippers are bad. In winter the temperature of the lower part of the room is apt to be 10 degrees or 15 degrees lower than that of the upper.

It is indispensable in all forms of labor requiring the exercise of vision on minute objects, that the worker should rise from his task now and then, take a few deep inspirations with closed mouth, stretch the frame out into the most erect posture, throw the arms backward and forward and if possible, step to a window or into the open air if only for a moment. Two desks or tables in a room are valuable for a student; one to stand at, the other to sit at.

At a session of the department held on Wednesday afternoon, Dr. Lincoln presented a paper upon the Nervous System as affected by School Life. We quote these passages.

OTHER SOURCES OF DEGENERACY.

Our entire nation is believed to be suffering from certain widespread sources of nervous degeneracy. Our children are but a part of the nation, and must suffer along with the older members of the population. How shall we discriminate between what is national, and what is simply scholastic? Give the child a constitution derived from excitable parents; a nutrition in infancy and childhood from which iron, lime, and the phosphates are mainly excluded; a diet in later childhood, most abundant, but most unwholesome, and based upon a national disregard of the true principles of cookery; a set of teeth

which early fail to do their duty; a climate which, at its best, is extremely trying; killing either the aged by excessive cold, or the little children by a tropical heat; an atmosphere so deprived of moisture that the most casual observers speak of it, and men of science consider it as capable of modifying our constitutions most profoundly; add to these influences those of a moral nature,—arising from the democratic constitution of our society, spurring on every man, woman and child, to indulgence in personal ambition, the desire to rise in society, to grow rich, to get office, to get everything under the heavens; add a set of social habits, as applied to the life of young girls and boys, which is utterly atrocious, which robs so many of them of their childhood at the age of ten or twelve, and converts them to simpering self-conscious flirts and men of the world, rude and independent of control, a depraved and pitiable breed of "little women and little men"; and finally the fact that we have now a population of 6,000,000, dwelling in cities of over 100,000 inhabitants, and exposed to those deteriorating influences which notoriously belong to great cities; give the child these conditions to grow up under, and can you wonder that he or she "deviates from the type" (as it is fashionable to say) of the sturdy Anglo-Saxon pioneer who settled this continent? And can we wonder that educators, persons deeply interested in their profession and sincerely conscientious, should protest against the charges brought by physicians against their systems of instruction; should protest against the very title of this paper, and should appeal from the laziness and folly of parents, and what they consider as the professional prejudices of medical men?

NERVOUS DERANGEMENT PRODUCED AT SCHOOL.

First, a group collectively termed "Neurasthenia," composed of debility and general depression, dyspepsia, sleeplessness, irritability, headache; then nose-bleed, a symptom of congestion, which seems quite rare in America as compared with some parts of Europe; then chorea, or St. Vitus Dance, a disease of childhood proper; then neuralgia, hysteria, irritable spine, or spinal anæmia, and menstrual anomalies.

A NATURAL CRAVING FOR EXERCISE.

Our life is largely made up of appetites or cravings of various sorts. The most familiar of these are the craving for food and drink, for breath, for sleep, for air and sunlight. The presence of any one of these, in a healthy person, shows the chemical exigency or crisis, which requires the addition of some element—carbon, oxygen, nitrogen, fat, starch, animal fibre, salt, water, and so on—or the introduction of some force, as light, heat or atmospheric electricity. If these are not gratified, the health suffers. Now there is another class of cravings, equally important and equally imperious in their claims; I mean the various desires to *expend* animal or mental force; the longing to exert muscular energy, the desire to move about after having sat still for a long time. The entire range of our mental powers furnishes us with examples of a similar sort, as the gifts of speech, of laughter, of musical genius, of the power to observe, to paint, carve, or otherwise represent, the power to command other wills, the capacity for greatly loving other persons, for receiving and giving sympathy; all these must be exercised by those healthy human beings who possess them, under penalty of a loss of well-being.

Now it is evidently impossible to exercise all our faculties at once in such a way as to bring each to a state of the utmost development. It is the business of an educator to see, first, that the faculties essential to well-being are developed; the muscles of respiration, through singing, dancing, running, and childish athletic sport; the muscles of the will, by similar methods, and perhaps gymnastics; the intelligence, by school instruction of various sorts; but while doing this, he should bear in mind those traits of childhood which are most irrepressible, and should both guide them and be guided by them. Muscularity—or more rightly expressed, a liberal indulgence in muscular sports—is the craving of healthy boyhood; if denied, no amount of mental occupation will take its place; on the contrary, mental stimuli are most

dangerous to a boy who is physically idle, and only tend to hasten those sexual crises (so fatally ignored by so many educators) which are sure to come, and to place a certain proportion in peril both of health and morals. I am speaking of a great evil, and one little understood; for which the remedies are to be found in a liberal stimulation of all the nobler parts of a boy's nature at once—his will, his courage, his fortitude, his honor, his sense of duty to God and man, his interest in some mental pursuit.

POSSIBLE AND DESIRABLE BENEFITS OF SCHOOL.

I come now to another set of causes, which ought favorably to influence the health of scholars. I refer to the fact, not much understood in a practical way, that *happiness* is of itself one of the surest sources of health, or in medical terms, that joy is the best tonic we possess. Pleasurable sensations are imparted by all efforts made willingly, if within our powers. The scholar has that source of pleasure constantly, if he is well managed. He is interested—and interest is the chief factor in happiness, while want of interest is a sort of hell on earth. He has the sense of mastering difficulties, of conquering his own weakness and ignorance. His cheerfulness is promoted by making the work brisk and vigorous, both in recitation and during study. He is conscious of success and of gain, and that without reference to the standard of his fellows, but by reference to himself. His self control and habits of order are strengthened, which must indirectly prove beneficial to his health. And finally, he is conscious of having a friend and sympathizer in the person of his teacher; or if not, there is serious fault to be found somewhere; either the teacher is deficient, or else the class is so numerous that it is impossible for him to know the characters of his pupils.

DISCOURAGEMENT A CAUSE OF DISEASE.

And here let me say, that if mental enjoyment does good to the system, the sensation of inadequacy to one's task is a source of acute suffering and injury. Pain felt in a nerve is a proof that the nerve is not duly nourished, or has been tired out by overwork; and in accordance with this fact we find that its proper function, that of distinguishing objects by means of touch, is weakened during an attack of neuralgia. In the muscles, fatigue easily passes into pain, which may quite cripple one for a while, as when a person begins too violently with gymnastic exercises. But in the mind we feel the pain called depression of spirits, when required to discharge mental functions beyond our strength. The sensation is like that felt by insane patients, suffering from Melancholia, to whom life is only a burden, and suicide the only apparent duty. But it is rarely the case that such a condition occurs in young children. If overworked, their minds are also apt to be strongly interested, their feelings in a state of tension; their ambition acts as a spur, and does not let them know how tired they are; so that irritability rather than depression is characteristic of children suffering from school tasks. And be it said, that this state is mostly needlessly aggravated by a great many petty restrictions and points of discipline, which keep the child in a state of continual apprehension. He is perhaps marked for tardiness, and hence eats his meals in a state of trepidation lest he come late to school; he is marked for each recitation; he is constantly inquiring how he stands, and if he is ambitious, the consciousness of impending destiny is ever present to his mind. I speak not of such folly as giving a child a demerit for not coming to school five minutes before the hour appointed; or giving merits for the performance of tasks like sweeping down the stairs of the school house, or sharpening the other children's slate pencils! But we are called upon very strongly to condemn all points in the management of schools, which give rise to anxiety, apprehension, exaggerated feeling, in short, of any sort, whether of joy or pain, in the minds of scholars.

OVERWORK THROUGH QUANTITY.

A child is capable of doing a good deal of work, but it must be done under the conditions of perfect sanitary surroundings, and above all, of frequent rest. "The child's brain soon tires," says West, "and the arrange-

ment so convenient to parents of morning lessons and afternoon play, works far less well for it than if the time were more equally divided between the two." The need of frequent recesses is admitted by all, but I find decided differences of opinion among teachers as to how frequent they should be. If a child of eight or nine years works half an hour, he may be perfectly refreshed by five minutes' rest and amusement, and ready to go to work again, but if he is kept at his task for four half hours continuously, twenty minutes will not begin to suffice to bring him up to condition. A long unbroken session takes out of a young child more than he can make good by repair before the next session; and the total of these excesses of waste is subtracted from his total growth, stunting his body and mind together.

Deprivation of sleep is another factor in producing exhaustion. And let it be remarked that the worst thing about "home lessons" is the danger that they will be studied late in the evening, and by the congested condition of the brain thus produced, prevent the child from falling into a sound refreshing sleep.

Deprivation of food often occurs. A child under twelve cannot usually go more than four hours without food; and privation of this sort, though willingly borne by the zealous scholar, makes itself felt at the next meal-time by an incapacity to relish or digest what is set before him. Schools should always make provisions of time and place for the scholars' luncheons, and if there is a long session, parents ought to be expressly informed of this, and requested to furnish their children with something suitable. As for the regular meals, a parent is inexcusable who will permit a child to miss them, or to take them irregularly or to lose its appetite for them, except in case of war, insurrection or peril by sea.

There is a condition, not frequent in the adult occupants of schools in which a person seems to have used up all the surplus of vital force, he possesses. There is no remedy for such cases but a protracted rest from all that can tax the powers.

OVERWORK THROUGH MONOTONY.

Educators, whether teachers or parents, are always liable to forget that the extreme volatility of a child cannot be conquered, but belongs to his nature; hence, his tasks are always liable to be too monotonous—more like what an adult would think suitable than what a child would really be best suited with. Now, the overtraining of a faculty in any one direction is a most serious matter. If a clerk is kept too long at writing, the muscles which hold his pen grow weary; the weariness grows chronic; pain and constraint begin to be felt whenever he takes up his pen; one muscle gives out entirely and he tries to make its place good by adopting a new plan of holding his pen, but the new way has again to be given up, and the entire process of writing soon becomes insupportable; he may even be prevented from work by muscular spasms in the fingers. The remedy consists in three things: first, rest; second, treatment of the wearied muscles; and, thirdly, regular voluntary exercises of the other muscles—those which are little or not at all affected—of the hand and arm; in other words, the hand has to be drilled into a habit of distributing its forces among various functions. The amount of mental and physical energy which would carry a man easily through a day's work on a farm, may thus, if concentrated upon one set of muscular functions, set up a disease in the latter which will end in paralysis. Nor is it true of the hand alone. A whole class of these diseases exists, denominated by the Germans *beschäftigungs-neurosen*, or professional diseases; thus the shoemakers' cramp, the ballet-dancers' cramp, the "hammer-palsy" of sledge-hammer men, and the myalgia (muscular pains and debility) of sewing-women.

We often hear a distinction made between "natural" and "unnatural" forms of bodily exercise; and the preference is instinctively given to the former by most people. Now the very best forms of natural exercise are those which develop a rhythmic sequence of effort and cause. Walking, dancing and running never exercise the two halves of the body at the same time in the same way; the efforts may be constant, but they are relieved by

alternations of right and left. In fencing, the old masters try to teach a similar balance. It is not in man's nature with a pair of organs, right and left, to use both at once in an absolute identical way. Standing in a military position is the most fatiguing thing possible. And if we turn to an organ like the eye which is capable of severe labor of a more intellectual nature, we find that though both retinae are used together, yet both take turns, at intervals, of resting, so that we actually, while looking intently at an object, do lose sight of it, though unconsciously, for a second, upon the right, and presently for a second upon the left side, and so on. Riding presents an instance where a pair of muscles must be kept rather firmly and steadily stretched to clasp the saddle; but in riding the whole body of the man is subjected to the rhythm of another body, that of the horse, so that a multitude of unconscious movements are made in the most perfect rhythm back and forward, to right and left, by the trunk. I need not speak of the respiration, the beat of the heart, the natural movements of digestion. Worshipers in the true temple of Hygiea use for the most part an antiphonal service and the antiphony of effort and pause, in mental operations, gives the most beautiful—as the Greeks would say, the most musical—stimulus and expression to the mind.

We do not as yet realize how intellectual an organ a muscle is. Those of the face are called mimetic, or muscles for the expression of emotion, but every voluntary muscle in the body, when in action, expresses the energy of one of the most complicated intellectual processes, though one little thought of as such—that of volition. And I cannot refrain from tracing the analogy a step or two further, between the case of writers' palsy, and that of nervous excitability and exhaustion from severe tasks at school. The child's mental trouble shows itself by unreasonable behavior, fits of ill-temper, quite foreign to his proper disposition; and the man's muscular trouble is commonly associated with strange and purposeless jerkings of the muscles, equally foreign to purpose and reason.

And still further; if you observe a man trying to write in this disorder, you will see that the anxiety of the effort makes him ten times worse—as if his hand were afflicted with stuttering—while you will know that the anxieties arising from emulation, contention for prizes and rank, the unceasing effort to hold the tongue, to sit straight, to reach a given goal at a given time, wear out a child vastly more than long, hard lessons.

SANITARY CONDITIONS OF THE SCHOOL-ROOM.

There are three special faults in sanitary conditions which do harm to the nervous system of those in school-rooms. These are, the means employed in lighting evening schools, the undue heat of school-rooms, and the excessive dryness of their atmosphere, with other impurities.

Our nation is fond of burning a good deal of gas or mineral oil, and as a result, our rooms are apt to get overheated. One gas burner consumes as much oxygen in an hour as several persons, thus contaminating the air very rapidly and heating the upper strata very much. In burning, gas gives out impurities, very perceptible to the smell, chiefly composed of sulphurous acid gas. Besides which, the power to direct radiation of heat possessed by a cluster of burners is very great; so that the heads of persons in the room, enveloped in a cloud of hot deoxygenized sulphuretted vapor, are subjected to the effects of radiant heat, which are of an irritating nature, quite different from those of fixed heat. Of course headaches and utter exhaustion are the result.

It is the general custom, I am sure, in American school houses, to keep the thermometer at about 70 degrees F., provided the furnace will deliver heat enough. Dr. Bowditch says: "In the sitting room (of a family) the heat should not be above 72 degrees F., nor below 68 degrees; 70 degrees, the medium, is the best." Now, with all possible respect for such high scientific authority, I beg to demur to this standard, widely accepted though I know it to be; for young persons and children, if properly fed and clothed and dried, it appears to me that 66 degrees or

67 degrees is quite enough. In the only perfectly ventilated schools I now remember, the temperature was kept at this point, and no complaint of cold was made by the scholars. The effects of excessive dry heat of climate upon persons of our race are usually manifested in the production of "simple general debility, a weakening of the bodily functions, marked by a diminution of the assimilative and digestive powers, and resulting in the loss of weight, and anæmia or poverty of the blood." And there is good reason to suppose that a difference of four or five degrees constitutes an important difference in climate. In an equable summer climate, a rise of the thermometer at noon to 76 degrees may be felt as an uncomfortable heat, while a fall to 68 degrees will designate the day as "cold."

Neither heat, carbonic acid and oxide, sulphurous vapor, nor excessive dryness of the atmosphere are felt as evils by the majority of our people. But all of them are dangerous in a special sense to the nervous system. Recent experiments made by Dr. Falk in Berlin, show that air deprived of moisture makes the breathing more rapid and less deep; it quickens the pulse, and slightly lowers the temperature of the body; and in a few instances it appears that a current of absolutely dry air, continued for several hours, produced epileptic attacks in guinea pigs exposed to it. Dryness of atmosphere certainly tends to make the human subject irritable and excitable.

A few people are the victims of untold misery when exposed to carbonic oxide fumes. I do not know what can be done absolutely to prevent the evil—unless we give up furnaces altogether.

CONSPICUOUS RESULTS OF INVESTIGATION.

I will now close this portion of my remarks with a brief summary of the most conspicuous results of the investigation.

First.—School work, if done in an unsuitable atmosphere, is peculiarly productive of nervous fatigue, irritability, and exhaustion.

Second.—By "unsuitable" is chiefly meant "close" air; or air that is warm enough to flush the face, or cold enough to chill the feet; or that is "burnt," or infected with noxious fumes of sulphur or carbonic oxide.

Third.—Very few schools are quite free from these faults.

Fourth.—Anxiety and stress of mind, dependent mostly on needless formalities in discipline, or unwise appeals to ambition, are capable of doing vast harm. It is hard to know how much is actually done; but a strong sentiment against such injudicious methods is observed to be springing up in the minds of teachers.

Fifth.—The amount of study required has not often been found so great as would harm scholars whose health is otherwise well cared for.

Sixth.—Teachers who neglect exercise and the rules of health, seem to be almost certain to become sickly or to "break down."

Seventh.—Gymnastics are peculiarly needed by girls in large cities, but with the present fashion of dresses, gymnastics are impracticable for larger girls.

Eighth.—The health of girls at the period of the menstrual function ought to be watched over with unusual care by persons possessed of tact, good judgment, and a personal knowledge of their character.

Ninth.—One of the great sources of harm is found in circumstances lying outside of school life. The social habits of many older children are equally inconsistent with good health and a good education.

A paper followed upon School Gymnastics, by Dr. S. S. Putnam, of Boston. In the evening, Mr. Barnard read a paper by the celebrated Italian Princess, Dora D'Istria, upon "The Instruction of Women in Italy." Of the paper read in the afternoon, prepared by Dr. C. A. Agnew of New York, this abstract is of interest to every teacher.

EYES RUINED IN THE SCHOOLS.

In 1867, Herman Cohn, of Breslau, published the results of observations made upon the eyes of 10,000 school children. He established the fact that school life in his

country was damaging the eyes of scholars to a most alarming degree. He was followed by Erisman, of St. Petersburg, and others who showed that elsewhere the same results were being produced. The broad fact was evidently demonstrated that wherever children were brought under observation, and the effects of the use of their eyes upon minute objects carefully noted, near-sightedness, a *grave malady*, was found to exist. That this malady was found less frequently, and then generally only in a mild form in young children, but that it increased rapidly in frequency and gravity as these children were pushed forward in their education from the lowest to the highest schools. Cohn, for example, found that the near-sightedness rate in the village schools was less than 2 per cent.; that it had increased, however, to 26 per cent. in the gymnasia (schools about of the grade of most of our colleges in the United States); and that in the Breslau University, out of 410 students examined, *not one-third* had normal eyes.

Observations were recently made upon 2,884 eyes in this country. The plan followed is essentially that of Cohn, so that the results may be compared with those of so industrious and careful an observer. The sources from which the data have been drawn are the District, Intermediate, Normal and High Schools of Cincinnati, Ohio, (the examinations made by Drs. D. B. Williams, and Ayers,) from the Polytechnic School in Brooklyn, N. Y., (examinations by Dr. J. S. Prout and Dr. Arthur Mathewson;) and from the New York College, New York, (examinations by Dr. W. Cheatham.)

The following is a summary of tables accompanying this paper: In the Cincinnati schools, the number of eyes examined was 1,264. In the district schools 13.27 per cent. of the scholars were near-sighted. In the intermediate schools 13.8 were near-sighted, and in the normal and high schools 22.75 were near-sighted. In the academic department of the Brooklyn Polytechnic 9.15 per cent. were near-sighted, while in the collegiate department of the same school 21.38 were near-sighted. In the introductory class of the New York College 21.86 of the students were near-sighted; of the freshmen, 26.2 per cent. were near-sighted and of the sophomores 22.72. The summary of all is that, of 2,884 eyes examined, 1,886 eyes had normal refraction, 588 were near-sighted, 227 were over-sighted, and 152 astigmatic; and of 81 the refraction was not noted. Acuity of vision: 2,300 eyes had vision equal 1; 226 equal $\frac{1}{2}$; 106 equal $\frac{3}{4}$; 43 equal 2-5; 49 equal 2-7; 40 equal 1-5; 28 equal 3-40; 19 equal 1-20; 8 able only to count figures; 1 with no perception of light; 4 vision not noted.

Superintendent Wm. T. Harris read a paper upon

IDEAL EDUCATION IN AMERICA.

He first defined the word "idea," quoting the explanations of Plato and Aristotle in reference to the word and thought conveyed by it. We may look, he said, upon the entire round of the possibilities of a thing as its complete idea, as its pure form, or, in one word, as its idea. He then contrasted the ideal of man and the ideal of things, and we quote the paragraph containing this contrast both for its own value and because of the suggestions which it makes concerning true education. It is as follows:

In the world of nature each thing exists in relation to all other things in space, and this manifold relation contains the potentialities of the thing. The realization of the potentialities of the thing is the destruction of its individuality. Man, on the other hand, may be defined as the being whose potentialities exist within his individuality. Hence, man is conscious and immortal; he is the being with an ideal. His possibilities exist for him; he may know them and realize them through his own activity; and since the same idea has been given by an Aristotelian philosophy to such a totality of self-activity as can realize its potentialities, it is clear that each man may be called an idea or self-determined being. He is more than a reality, for he possesses the energy of the ideal totality, and he is an *actuality*. With such a being we have to deal in education. Man knows his present reali-

zation to be inadequate to his ideal nature. He does not regard his reality as his actuality. He is conscious of manifold possibilities of a fair ideal which is more truly himself than the growth he has realized. His possibilities belong to him and are under the control of his will. As his ideal is his true nature he preserves his individuality and becomes more truly himself by the process of realizing this ideal. In this activity of self-realization, education includes a large and important sphere. In fact the whole of life in a certain sense may be said to be education in that it is the vocation of man's life to realize his ideals. In a much more restricted sense, however, education includes such self-activity as is especially devoted to realizing in man his theoretical and practical freedom. Even more restricted than this, education means the initiation of the youth into the theoretical and practical conventionalities and dexterities of his race and nation. School education endeavors to give only the theoretical and moral training requisite to fit the pupil to enter practical life. The end of all education is to enable man to exist as ideal—to actually live his true ideal nature. School education ends when the end and means of the realization of rational existence are known to the pupil.

ANALYSIS OF THEORETICAL EDUCATION.

These general conventionalities of intelligence which form the context of education are the means invented by the race for the apprehension of its ideal and the mastery over the instruments of its realization. It comes to pass, therefore, in education, that there is a twofold division of topics of instruction: I., nature; II., spirit.

The subdivisions include, under nature, (a) its inorganic phases, (b) its organic phases; under spirit, (a) theoretical, (b) practical and (c) æsthetic. Tabulating these we shall have the general description of the normal course of study for all grades of schools devoted to general theoretical education.

I.—INORGANIC NATURE.

Mathematics, or the science of the general form of nature, as existing in time and space, and hence is quantitative.

Physics, molar and molecular, including the science of the contents of nature in their qualitative aspect.

II.—ORGANIC NATURE, OR CYCLIC.

Natural History and all natural sciences which have for their object a circular movement, or cyclical process, and especially the organic word: Hence astronomy, meteorology, geology, botany and zoology.

III.—THEORETICAL MAN, OR INTELLECT.

Philosophy, or the science of the instrument invented for the reception and preservation of thought.

Philosophy, which investigates the universal and necessary conditions of existence, the pure ideal forms that appear in logic, psychology and other spheres more concrete. The study of language is the proper complement to this field of study.

IV.—PRACTICAL MAN OR WILL.

Civil History, portraying "man's progress in the consciousness of freedom" by means of political organization.

Social and Political Science, investigating the evolution of institutions of society and the logical basis of the same.

V.—ÆSTHETICAL MAN OR ART.

Fine Arts, and especially *literature*, is the symbolic picture to man of himself, the collections of his ideal and real and the reconciliation of the two.

In primary education these five provinces are represented by (a) arithmetic, (b) geography, (c) grammar, (d) history, (e) literature, (extracts in the reading books.)

In secondary education each province is continued: (a) higher mathematics and physics, (b) physical geography and optical sciences treated with it, (c) languages and philosophy, (d) universal history and civil government, (e) philosophy of art, history of literature, rhetoric.

SCHOOLS FOR SECONDARY INSTRUCTION.

After eulogizing the value of the study of the classics Supt. Harris continued as follows:

The demands of our time require an immense increase in the production of directive power to manage the corporate organizations which the necessities of urban life have called into existence. Hence, the need of more and better secondary education. The established college system has not yet yielded to the popular demands based on the expansion which has been mentioned in the development of science and literature. The common school system of the country has generally given way to the pressure, but not in all cases wisely, for the reason that it has not preserved the old and recognized the new with it, but has left a conflict.

The consequence is a decided lack of harmony between the ideal course of study prescribed by the college in its preparatory schools and that actually existing in the common schools. The result is adverse to the transfer of pupils from the common schools to the colleges, and a consequent prevention of the normal proportion of those who seek secondary education. If institutions of secondary instruction demanded in their requirements for admission, besides the usual amount of Latin, Greek and mathematics, an acquaintance with the elements of physics and natural history, the outlines of universal history and English literature, they would at once force the special preparatory schools to adopt the curriculum of the common schools, and I think that a more healthful and beneficial effect would be exerted by colleges on the common school system. To banish the natural sciences and literature and history to the end of the college course, is to find a class of students little interested in those matters and not prepared by gradual growth for the philosophical generalization involved in their discussion. Advanced views cannot be communicated unless the basis has been prepared by quiet assimilation. During the entire college course, there should be a discussion of the methodology of the sciences, and not the acquirement of a mere smattering of the details just at the close of the course. But in order that this may be, there must be some preparation in the elements of these sciences before entrance to college.

I do not urge the early study of literature and the sciences for their disciplinary value, but solely for their necessity as conveying intelligence and as for furnishing the data of generalization. The proper mastery of knowledge involves three stages of thinking upon it, and those must succeed each other at intervals long enough to allow of complete assimilation. The perceptive, the reflective, the stage of insight cannot be simultaneous as regards one of the same objects of cognition; therefore the course of study should be so arranged as to be exhaustive at each of the epochs—including representative branches from each of the five departments of knowledge. The mind should grow with all its windows open from the beginning.

THE ÆSTHETIC A PATH TO THE IDEAL.

On account of the potency of æsthetic art, especially in its literary form, in promoting the emancipation of the mind from mere attractions, and in elevating it to ideas of ideals which are concrete and rule the world, I cannot but think that on this side we might hope for the greatest results from a reform. There should be a course of lectures to every class in the High School and college once a year on the works of the great masters. And these should not dissipate the attention upon biographical materials and inferior works, but should treat directly of the greatest work or works and should endeavor by all devices to arouse in the pupil the higher faculty named insight which is oftenest aroused through the genial inspiration of works of art.

There is a road leading from one work of art to another and from one form of art to another. To see how different arts will portray the same conclusion, and to see the limits of each art, and above all, to see that art has an earnest object, that it is not merely for amusement, but that all true art gives us glimpses of the eternal verities, these are some of the objects of art instruction which exist in all our schools.

By realizing for himself in the world this ideal, man creates for himself a new element, in which he lives and may enjoy a higher existence as a rational being. The

four elements—earth, air, fire and water—are good in their way and essential to the physical body. The 'fifth element,' as it is named by a Western poet, is the 'element of realized intelligence,' and is the product of the self-activity of man, and miraculously, it is at the same time the nurture and support of the very intelligence which produces it. It is the atmosphere of civilization. Its ideals

"Uphold us, cherish, and
Are the fountain light of all our day,
And yet the master light of all our seeing."

WHAT WE LEARNED IN PHILADELPHIA.

First—That not a single school house had ventilating arrangements of the slightest use, except one new building, and even the apparatus of that building was wholly insufficient.

Second—That in consequence of such deficient ventilation, particularly in cold weather, not only do the children and teachers become languid and unfit for study, but their lives are greatly jeopardized from the inhalation and re-inhalation of a vitiated atmosphere.

Third—That the only practicable method of securing a tolerable supply of pure air in the various rooms was by the uncomfortable and hazardous resource of open doors and windows.

Fourth—That the condition of the privies of the various schools was, with few exceptions, simply abominable, and, notwithstanding the fact that observations were made in the Richmond School, on one of the coldest days, a fearful odor from the privies pervaded the entire lower story of the buildings.

Fifth—That owing to neglect in the proper care in placing children of different sizes at desks suitable to them they often assume faulty postures both in sitting and standing, and many likewise, from the same cause, become victims of defects of the visual organs.

Sixth—That owing to poor ventilation, improper selection of desks, "cramping" of studies, and ill arranged school sessions, the rising generation does not promise to be a race of Spartan physique.

SUGGESTIONS.

First—Every school building, old or new, whether heated by stoves or hot-air furnaces, should be supplied with a ventilating apparatus, amply sufficient to render its atmosphere during school hours, especially in cold weather, comfortably pure, with all doors and windows closed.

Second—The privies should be daily inspected by the janitors, and kept, particularly in warm weather, well deodorized by proper disinfectants; and what is called the "key system," should, as far as practicable, be introduced into the schools.

Third—Desks of at least three different heights, should be furnished to every large class-room, and special care should be exercised by the teachers in properly locating children of different stature. The custom of changing seats every two weeks, should cease, and the old time way of having the children occupy their class rank only while at recitation should be revived.

Fourth—Finally, all "cramping" systems should be abolished. The double, daily school session should be replaced by a single session, with half-hour recess, and the children should all be dismissed by two p. m., thus enabling them not only to avoid acquiring the peculiarly American habit of rapid dining, but, also, giving them opportunity for that complete relaxation of body and mind, so necessary to the healthful development of all young people.

THE EFFECT OF EMOTION.—It is related by Sprengel in his "Geschichte der Arzneikunde," that the Arabian physicians sometimes relied with great success on moral means, of which the following is a striking instance. One of Haroun Al-Raschid's wives suffered from paralysis of both arms. Dschibrail, the court physician, induced the caliph to summon all the leading nobles to a large hall in his palace, and then introduced the lady to the assembled multitude. Without a word of preface he raised her veil, when feelings of shame and fear restored strength to the palsied arms. The lady hastily drew her veil down again, and was cured from that hour.

MORITURI SALUTAMUS.

*Tempora labuntur, Tacitisque senescimus annis,
Et fugient freno non remorantur dies.*
—OVID, *Fastorum*, Lib. iv.

"O Cæsar, we who are about to die
Salute you!" was the gladiators' cry
In the arena, standing face to face
With death and with the Roman poplace.

O ye familiar scenes—ye groves of pine,
That once were mine, and are no longer mine,—
Thou river, widening through the meadows green
To the vast sea, so near and yet unseen—
Ye halls, in whose seclusion and repose
Phantoms of fame, like exhalations, rose
And vanished,—we who are about to die
Salute you; earth, and air, and sea, and sky,
And the Imperial Sun that scatters down
His sovereign splendors upon grove and town.

Ye do not answer us! Ye do not hear!
We are forgotten; and, in your austere
And calm indifference, ye little care
Whether we come or go, or whence or where.
What passing generations fill these halls,
What passing voices echo from these walls,
Ye heed not; we are only as the blast,
A moment heard, and then forever past.

Not so the teachers who in earlier days
Led our bewildered feet through learning's maze;
They answer us,—alas! what have I said?
What greetings come from the voiceless dead?
What salutation, welcome, or reply?
What pressure from the hands that lifeless lie?
They are no longer here; they are all gone
Into the land of shadows,—all save one.
Honor and reverence, and the good repute
That follows faithful service as its fruit,
Be unto him whom living we salute.
The great Italian poet, when he made
His dreadful journey to the realms of shade,
Met there the old instructor of his youth,
And cried in tones of pity and of ruth:
"O, never from the memory of my heart
Your dear, paternal image shall depart;
Who while on earth, ere yet by death surprised,
Taught me how morals are immortalized;
How grateful am I for that patient care
All my life long my language shall declare."

To-day we make the poet's words our own,
And utter them in plaintive undertone;
Nor to the living only be they said,
But to the other living called the dead,
Whose dear, paternal images appear
Not wrapped in gloom, but robed in sunshine here;
Whose simple lives, complete and without flaw,
Were part and parcel of Nature's law;
Who said not to their Lord, as if afraid,
"Here is thy talent in a napkin laid,"
But labored in their sphere, as those who live
In the delight that work alone can give.
Peace be to them; eternal peace and rest,
And the fulfilment of the great behest:
"Ye have been faithful over a few things,
Over ten cities shall ye reign as Kings."

And ye who fill the places we once filled,
And follow in the furrows that we tilled,
Young men, whose generous hearts are beating high,
We who are old, and are about to die,
Salute you; hail you; take your hands in ours,
And crown you with our welcome as with flowers!

How beautiful is youth! how bright it gleams
With its illusions, aspirations, dreams!
Book of Beginnings, Story without End,
Each maid a heroine, and each man a friend!
Aladin's Lamp, and Fortunatus' Purse,

That holds the treasures of the universe!
All possibilities are in its hands.
No danger daunts it, and no foe withstands;
In its sublime audacity of faith,
"Be thou removed!" it to the mountain saith,
And with ambitious feet, secure and proud,
Ascends the ladder leaning on the cloud!
As ancient Priam at the Scæan gate
Sat on the walls of Troy in regal state
With the old men, too old and weak to fight,
Chirping like grasshoppers in their delight
To see the embattled host, with spear and shield
Of Trojans and Achæans in the field;
So from the snowy summits of our years
We see you in the plain, as each appears,
And question of you: asking, "Who is he
That towers above the others? Which may be
Atreides, Menelaus, Odysseus,
Ajax the great, or bold Idomeneus?"
Let him not boast who puts his armor on
As he who puts it off, the battle done.
Study yourselves: and, most of all, note well
Wherein kind nature meant you to excel.
Not every blossom ripens into fruit;
Minerva, the inventress of the flute,
Flung it aside, when she her face surveyed
Distorted in a fountain as she played;
The unlucky Marsyas found it, and his fate
Was one to make the bravest hesitate.

Write on your doors the saying wise and old,
"Be bold! be bold! and everywhere be bold;
Be not too bold!" Yet better the excess
Than the defect; better the more than less;
Better like Hector in the field to die,
Than like a perfumed Paris turn and fly.

And now, my classmates, ye remaining few
That number not the half of those we knew;
Ye, against whose familiar names not yet
The fatal asterisk of death is set,
Ye I salute! The horologue of Time
Strikes the half century with a solemn chime,
And summons us together once again,
The joy of meeting not unmixed with pain.

Where are the others? Voices from the deep
Caverns of darkness answer me: "They sleep!"
I name no names; instinctively I feel
Each at some well-remembered grave will kneel,
And from the inscription wipe the weeds and moss
For every heart best knoweth its own loss.
I see the scattered gravestones gleaming white
Through the pale dusk of the impending night;
O'er all alike the impartial sunset throws
Its golden lilies mingled with the rose;
We give to all a tender thought, and pass
Out of the graveyards with their tangled grass,
Unto these scenes frequented by our feet
When we were young, and life was fresh and sweet.

What shall I say to you? What can I say
Better than silence is? When I survey
This throng of faces turned to meet my own,
Friendly and fair, and yet to me unknown,
Transformed the very landscape seems to be;
It is the same, yet not the same to me;
So many memories crowd upon my brain,
So many ghosts are in the wooded plain,
I fain would steal away, with noiseless tread,
As from a house where some one lieth dead.

I can not go; I pause—I hesitate;
My feet reluctant linger at the gate;
As one who struggles in a troubled dream
To speak and cannot, to myself I seem.

Vanish the dream! Vanish the idle fears!
Vanish the rolling mists of fifty years!
Whatever time or space may intervene,
I will not be a stranger in this scene,

Here every doubt, all undecision ends;
Hail, my companions, comrades, classmates, friends.

Ah me! the fifty years since last we met
Seem to me fifty folios bound and set
By Time, the great transcriber, on his shelves,
Wherein are written the histories of ourselves.
What tragedies, what comedies are there;
What joy and grief, what rapture and despair!
What chronicles of triumph and defeat,
Of struggle, and temptation, and retreat!
What records of regrets, and doubts and fears!
What pages blotted, blistered by our tears!
What lovely landscapes on the margin shine,
What sweet, angelic faces, what divine
And holy images of love and trust
Undimmed by age, unsoiled by damp or dust!
• Whose hand shall dare to open and explore
These volumes, closed and clasped forever more?
Not mine. With reverential feet I pass;
I hear a voice that cries, "Alas! alas!
Whatever hath been written, shall remain,
Nor be erased nor written o'er again;
The unwritten only still belongs to thee,
Take heed, and ponder well what that shall be."

As children frightened by a thunder-cloud
Are reassured if some one reads aloud
A tale of wonder, with enchantment fraught,
Or wild adventure that diverts their thought,
Let me endeavor with a tale to chase
The gathering shadows of the time and place,
And banish what we all too deeply feel
Wholly to say, or wholly to conceal.

In mediæval Rome, I know not where,
There stood an image with its arm in air,
And on its lifted finger, shining clear,
A golden ring with the device, "Strike here!"
Greatly the people wondered, though none guessed
The meaning that these words but half expressed,
Until a learned clerk, who at noonday
With downcast eyes was passing on his way,
Paused, and observed the spot, and marked it well,
Whereon the shadow of the finger fell;
And, coming back at midnight, delved and found
A secret stairway leading under ground.
Down this he passed into a spacious hall,
Lit by a flaming jewel on the wall;
And opposite a brazen statue stood
With bow and shaft in threatening attitude.
Upon its forehead, like a coronet,
Were these mysterious words of menace set:
"That which I am, I am; my fatal aim
None can escape, not even yon luminous flame."
Midway the hall was a fair table placed,
With cloth of gold, and golden cups enched
With rubies, and the plates and knives were gold,
And gold the bread and viands manifold,
Around it, silent, motionless and sad,
Were seated gallant knights in armor clad,
And ladies beautiful with plume and zone,
But they were stone, their hearts within were stone,
And the vast hall was filled in every part
With silent crowds, stony in face and heart.
Long at the scene, bewildered and amazed
The trembling clerk in speechless wonder gazed;
Then from the table, by his greed made bold,
He seized a goblet and a knife of gold,
And suddenly from their seats the guests upsprang,
The vaulted ceilings with loud clamors rang,
The archer sped his arrow at their call,
Shattering the lambent jewel on the wall,
And all was dark around and overhead;—
Stark on the floor the luckless clerk lay dead.

The writer of this legend then records
Its ghostly application in these words:
The image is the Adversary old,
Whose beckoning finger points to realms of gold,

Our lusts and passions are the downward stair
That leads the soul from a diviner air;
The archer, Death; the flaming jewel, Life;
Terrestrial goods, the goblet and the knife;
The knights and ladies, all whose flesh and bone
By avarice had been hardened into stone;
The clerk, the scholar whom the love of self
Tempted from his books and from his nobler self.
The scholar and the world! the endless strife,
The discord in the harmonies of life!
The love of learning, the sequestered nooks,
And all the sweet serenity of books;
The market-place, the eager love of gain,
Whose aim is vanity, and whose end is pain.

But why, you ask me, should this tale be told
To men grown old, or who are growing old?
It is too late! Ah, nothing is too late
Till the tired heart shall cease to palpitate.
Cato learned Greek at eighty; Sophocles
Wrote his grand *Œdipus*, and Simonides
Bore off the prize of verse from his compeers,
When each had numbered more than fourscore years
And Theophrastus, at fourscore and ten,
Had but begun his *Characters of Men*,
Chaucer, at Woodstock with the nightingales,
At sixty wrote the *Canterbury Tales*;
Goethe at Weimar, toiling to the last,
Completed *Faust* when eighty years were past.
These are indeed exceptions; but they show
How far the gulf-stream of our youth may flow
Into the arctic regions of our lives,
Where little else than life itself survives.

As the barometer foretells the storm,
While still the skies are clear, the weather warm,
So something in us, as old age draws near,
Betrays the pressure of the atmosphere,
The nimble mercury, ere we are aware,
Descends the elastic ladder of the air;
The telltale blood in artery and vein
Sinks from its higher level in the brain;
Whatever poet, orator, or sage
May say of it, old age is still old age.
It is the waning, not the crescent moon,
The dusk of evening, not the blaze of noon;
It is not strength, but weakness; not desire,
But is surcease; not the fierce heat of fire,
The burning and consuming element,
But that of ashes and of embers spent,
In which some living sparks we still discern,
Enough to warm, but not enough to burn.

What then? Shall we sit idly down and say
The night hath come, it is no longer day?
The night hath not yet come; we are not quite
Cut off from labor by the failing light;
Something remains for us to do or dare;
Even the oldest tree some fruit may bear;
Not *Œdipus Coloneus* or Greek Ode,
Or tales of pilgrims that one morning rode
Out of the gateway of the Tabard Inn,
But other something, would we but begin;
For age is opportunity no less
Than youth itself, though in another dress,
And as the evening twilight fades away
The sky is filled with stars, invisible by day.

—Henry W. Longfellow, in *Harper's Magazine* for August.

LIGHTNING is composed of electricity. Kites are connected with it in some way. Probably by the string. A big man proved this once to the complete satisfaction of the youthful mind, and his memory has been honored ever since. He was so good that grown people rarely speak of him without a sigh, and young people, if left to themselves, never mention him at all. He was born in Philadelphia, and he is to be honorably mentioned at the Centennial, by the natives.

—"Jack-in-the-Pulpit," *St. Nicholas* for August.

Words by E. L. E.

NEVER MIND.

G. F. Root.



1. If the wind blows cold and chill, Never mind: If the road is

2. If a friend becomes a foe, Never mind: If a kindness

3. If should fail some promise sweet, Never mind, Never mind: If the fray en-



long up hill, Never mind: Cheerful courage, patient will, Bear us through the

meet a blow, Never mind: 'Tis by holding sorrow so, Men to nobler

force retreat, Never mind, Never mind: Other hopes and more complete, Wait for brave and



roughest ill, Never mind: Never mind, Never mind.

strength may grow, Never mind; Never mind, Never mind.

stead - y feet, Never mind: Never mind, Never mind.

Never mind, Never mind, Never mind.

From GRADED SINGERS, by permission of JOHN CHURCH & CO., Cincinnati, O.

NOTES.

QUESTIONS

Submitted to candidates for admission to the Chicago High School, June 17, 1875.

HISTORY.

TIME, ONE HOUR AND THIRTY MINUTES.

The questions are presented to the pupil in pairs, and permission is given to choose either one of the pair. Each pupil is expected to answer but one question of each pair, and no additional credit will be given for the answering of both.

1. To what nations did Columbus apply for aid, and which one assisted him?
2. Who was Amerigo Vespucci; how many voyages did he make, and what did he discover?
3. What extent of Territory did the English claim, and what was the basis of their claim?
4. Name two Spanish discoverers; two English; one French; one Dutch.
5. Name the first three States settled in order of settlement, with date of each.
6. What led to the settlement of Massachusetts? of Rhode Island? of South Carolina?
7. Who were the Pequods? What action did the settlers take with regard to them, and what was the result?
8. What can you say of King Philip's war?
9. What is peculiar in regard to the settlement of Pennsylvania?
10. What led to the settlement of Delaware?
11. Who were Wolfe and Montcalm? Where did they become famous?
12. What was the result of the capture of Quebec?
13. Name the prominent events of April and May, 1775.
14. Name the prominent events of June, 1775.
15. What acts of rebellion occurred previous to 1775.
16. When was pardon promised Americans, and who were excepted, and why?
17. Which year of the Revolution was most disastrous to the Americans, and what battles ended disastrously?
18. Which year of the Revolution was most favorable to the Americans, and in what battles did they gain signal victory?
19. What was the principal cause of the war of 1812?
20. What were the three principal naval battles of the war of 1812?
21. What made Gen. Jackson's administration famous?
22. What was the principal event of Lincoln's administration?
23. Name all the Presidents who served more than one term.
24. Name the Presidents who died while in office.
25. State the cause of the Mexican war.
26. What men distinguished themselves in the Mexican war?
27. Name two trees noted in our history, and for what noted.
28. Name two horseback rides that have been made famous by poets.

ARITHMETIC.

PRACTICE.

TIME, ONE HOUR AND THIRTY MINUTES.

1. Analyze fully: If $\$7\frac{1}{4}$ pay for $2\frac{2}{3}$ yards of cloth, how many yards can be bought for $\$4\frac{1}{2}$?

2. What will it cost to color the walls and ceiling of a Room 44 feet long, 20 feet wide, 14 feet high, at 85c per 100 square feet?
3. A granary 25 feet long, 8 feet wide, 6 feet high, is full of wheat; what is the value of the wheat at $\$1.12\frac{1}{2}$ per bushel.
4. If 120 men working 78 days, 10 hours a day, can make 9,448 yards of cloth, how many more yards can 300 men make in 312 days, working 10 hours and 10 minutes a day?
5. A speculator bought 320 acres of land at $\$16.37\frac{1}{2}$ per acre, and after keeping it a year sold it for $\$6172.72$; how much greater per cent. did he realize than he would have realized by lending his money at 10 per cent.?
6. Reduce to simplest form:

$$\left(\frac{6\frac{5}{7} \times \frac{1}{2} \text{ of } 50\frac{4}{5} \times 54\frac{9}{11}}{12 \times 43\frac{1}{2} \times \frac{3}{16} \times \frac{7}{9}} \right) \div 1\frac{1}{2}.$$
7. If a capitalist invests $\$10,000$ currency in U. S. 5-20s at 125, what is the currency value of the annual income from the investment when gold is 115?
8. What sum should a borrower receive from a bank for his note for $\$2000$, due in 90 days, if money is worth 8 per cent.?
9. A, B and C entered into partnership, agreeing to share the net profits in proportion to the capital furnished by each. B's capital was twice A's, and C's as much as A's and B's together. At the end of the first year it was found that the gross profits had been $\$26,250$, and that 20 per cent. of the same had been consumed by expenses. What share of the net profit belonged to each?
10. At $\$1.50$ a rod for fencing, what will it cost to inclose a square field containing 40 acres, and to run the cross fences necessary to divide it into 9 equal square lots? (Draw diagram.)

THEORY.

TIME, ONE HOUR.

1. Why does multiplying the numerator of a fraction multiply the value? Why does multiplying the denominator divide the value?
2. Show why a difference of one degree of longitude causes a difference of four minutes in time.
3. Name the Base in each of the following applications of Percentage: *Profit and Loss, Insurance, Stocks and Bonds, Interest, Bank Discount.*
4. Define *Prime Factor, Root, Ratio, Diameter, Exchange.*
5. By what measure, weight, or count, is the price of each of the following articles quoted in the market reports: *Flour, Hay, Corn, Lumber, Eggs, Brick, Packed Meats, Cotton, Oils, Wood?*

GEOGRAPHY.

TIME—ONE HOUR.

These questions are given in pairs, that the pupil may have the opportunity of choice. One question of each pair must be answered. No additional credit will be given for answering both questions. The answer will be numbered to correspond with the number of the question.

1. Give the boundaries of the Atlantic Ocean.
2. Give the boundaries of the Indian Ocean.
3. Bound the largest Grand Division of the Eastern Continent.

4. Bound the smallest Grand Division of the Western Continent.
5. Name the States that are drained to any extent by the Ohio River.
6. Name the States that touch the Mississippi River.
7. Name and locate the five longest Mountain Ranges of the world.
8. Name and describe the five longest Rivers of the world.
9. What causes the inequality of the length of day and night?
10. Give the boundaries of each Zone and its width in degrees.
11. Name and locate one City in each Grand Division of the Globe, with which Chicago trades in clothing material, and name the material, stating whether exported or imported.
12. Name and locate one Country in each Grand Division of the Globe, with which Chicago trades in articles of food, naming the articles and stating whether exported or imported.
13. Name five States whose principal production is Wheat; five, Sugar; five, Cotton; five, Gold; five, Iron.
14. Name the Country producing most Silk; most Wine; most Tea; most Coal; most valuable Timber.
15. Trace a water route from Chicago to the largest city of Europe.
16. Trace an all-rail route from Chicago to the largest city of the United States.
17. Name and locate the chief city of each State, having as its northern boundary the northern boundary of the United States.
18. Name and locate the chief city of each State, which has an Atlantic Seaport, naming also the Seaport.
19. Locate the following, and tell for what each is distinguished: *Sahara, Odessa, Vesuvius, Canton, Magellan, Quito, Sheffield, Java.*
20. Draw an outline map of Europe.

LANGUAGE.

TIME—ONE HOUR.

1. In how many ways may we convey our thoughts to others?
2. What department of Grammar pertains to the proper structure of sentences? What department to the proper arrangement of letters in a word? What is Etymology?
3. What two parts of speech are most frequently used, and why?
4. Analyze briefly this sentence: *Yesterday was the one hundredth anniversary of the battle of Bunker Hill.*
5. Parse the verbs in this stanza:
 "No cloud obscures the summer sky,
 "The moon in brightness walks on high,
 "And, set in azure, every star
 "Shines, like a gem of heaven, afar!"
6. Construct a sentence having a compound predicate.
7. Put in the form of poetry the following extract from Dickens.
 "It's a dark night, sang the kettle, and the rotten leaves are lying by the way; and above all is mist and darkness, and below all is mire and clay;

and there's only one relief in all the sad and murky air; and I don't know that it is one, for it's nothing but a glare of deep and angry crimson, where the sun and wind together set a brand upon the clouds for being guilty of such weather."

8. Change as many words as you can (not less than ten) in the following, and leave the ideas as they are:
 "The simplicity of winter has a deep moral. The reign of nature, after such a career of splendor and prodigality, to habits so simple and austere, is not lost either upon the head or the heart. It is the philosopher coming back from the banquet and the wine, to a cup of water and a crust of bread."
9. Define *Antecedent, Extraordinary, Interpose, Contradict, Eradicate, Helpful, Motionless, Misconstrue, Intolerable, Denial.*
10. Construct not less than five words by the use of prefixes and suffixes upon each of the roots *just* and *scribe*.

COMPOSITION.

TIME—THIRTY MINUTES.

Write a short composition upon either of the following subjects:

Circulation of the Blood.
Digestion.
Respiration.

MARK TWAIN, in the August *Atlantic*, mourns over the diminished length of the Mississippi, in this strain:—

Therefore: the Mississippi between Cairo and New Orleans was twelve hundred and fifty miles long one hundred and seventy-six years ago. It was eleven hundred and eighty after the cut-off of 1722. It was one thousand and forty after the American Bend cut-off (some sixteen or seventeen years ago.) It has lost sixty-seven miles since. Consequently its length is only nine hundred and seventy-three miles at present.

Now, if I wanted to be one of those ponderous scientific people, and "let on" to prove what had occurred in the remote past by what had occurred in a given time in the recent past, or what will occur in the far future by what has occurred in late years, what an opportunity is here! Geology never had such a chance, nor such exact data to argue from! Nor "development of species," either! Glacial epochs are great things, but they are vague—vague. Please observe:—

In the space of one hundred and seventy-six years the lower Mississippi has shortened itself two hundred and forty-two miles. That is an average of a trifle over one mile and a third per year. Therefore, any calm person, who is not blind or idiotic, can see that in the old Oolitic Silurian period, just a million years ago next November, the Lower Mississippi River was upwards of one million, three hundred thousand miles long, and stuck out over the Gulf of Mexico like a fishing rod. And by the same token any person can see that seven hundred and forty-two years from now the Lower Mississippi will be only a mile and three quarters long, and Cairo and New Orleans will have joined their streets together, and be plodding comfortably along under a single mayor and a mutual board of aldermen. There is something fascinating about science. One gets such wholesale returns of conjecture out of such a trifling investment of fact.

THE JOURNAL'S DESK.

FIRST LESSONS IN PHYSIOLOGY: for use in Common Schools. By C. L. Hotze, author of "First Lessons in Physics." Saint Louis: The Central Publishing Company, 1875.

It is one of the marvels of the age that so little attention is given to instructing children and youth in Physiology and Hygiene. Health is permanently injured or lost, lives are sacrificed, from ignorance of simple laws and facts which young children can readily understand. The teaching of a large proportion of what is usually included in the School Physiologies is wisely postponed to the High School course: much of it might with advantage be indefinitely postponed, as useless lumber, as far as the majority of our children are concerned. But instruction in the simpler matters of Physiology should be given in every primary school.

This book of Mr. Hotze is an attempt to meet the want which is felt by every teacher who endeavors to give real instruction in this science. As far as we can judge from a cursory examination it is a successful attempt, and should be heartily received and widely used. The subject is presented in a pleasing and attractive manner, in language suited to the comprehension of children. The discussion of each topic is based upon a simple experiment, which the pupil is encouraged to make for himself, and is thus led to the true method of study, investigation.

The book is finely illustrated, well printed and bound.

We are pleased to know that Mr. H.'s little work on Physics has met with a great demand. Mr. H. is a teacher in the Cleveland schools, and the Cleveland Board of Education has shown its approval of the work and appreciation of the author's desire to advance the welfare of the pupils, by adopting it as a text book. The teacher should make the text-book. No one knows the needs of the school-room as well as he. That Mr. Hotze's "Physics" has been in use in the Cleveland schools for the past three years is as complimentary to the school board of that city as it is to the author.

BOYS AND GIRLS IN BIOLOGY: or Simple Studies of the lower forms of Life, based upon the latest lectures of Prof. T. H. Huxley. By Sarah Hackett Stevenson, New York: D. Appleton & Company, 1875.

Mrs. Stevenson, Lecturer in the Woman's Hospital Medical College, Chicago, has made a very readable and instructive book, which will interest boys and girls of larger growth as well as the younger members of the race. Teachers especially will here find much valuable matter with which to arouse and instruct a class, and develop a taste for inquiry into things with which we come in contact every day. The fresh water hydra, the fresh water mussel, the lobster, the butterfly, etc., are treated in a way that cannot fail to interest a boy or girl.

The illustrations are from drawings by Miss Macomish, a prize pupil of Prof. Huxley, and a teacher of Science in the London schools.

We make the following extract in regard to the young of the fresh water mussel:—

"Now, I fancy you would like to hear about the little Anodons, or the babies of this toothless animal. Well, there are plenty of them, for the mussels are very old fashioned sort of folks, and believe in large families: some of them have as many as one hundred and twenty thousand little ones in one season. These babies are the funniest little things you ever saw; you would never imagine they belonged to their parents. They do not resemble at first either father or mother Mussel. * * * Soon after the little ones are hatched they may be found all tangled up in masses, wound about with these five flaxy ropes, inside the parent shell; but they soon untangle themselves, and leave their mother's house by the little back-door, or *dorsal siphon*, and they swim about by the flapping of the three-cornered parts of the shell. This looks like a very dangerous move of the Mussel, because it is so very young to make its way in the world of waters. But they are knowing little fellows of their age, so, instead of 'paddling their own canoe,' they jump on board

the first boat that goes past, which happens to be a fish, such as a stickleback or a roach, taking first class passage, for you always find them at the stern or tail of the fish, and they keep themselves from being washed overboard by hooking the little spines, or teeth of their shell, into the deck. While they are thus carried about by this water perambulator, they pass through many changes, and become exactly like their parents; then they leave the tail of the fish, and settle down in the mud for the rest of their lives."

A PRIMARY ARITHMETIC AND TEACHERS' MANUAL. With class and seat exercises graded with reference to the various stages of the pupil's advancement in reading. By Edward Olney, Professor of Mathematics in the University of Michigan and author of a Series of Mathematical Text-books. New York: Sheldon & Company, 1875.

A careful examination of this little text-book has convinced us its title is a true definition of its character. Its author has strewn the way to a knowledge of the rudiments of arithmetic with so many attractive objects it seems impossible that either teacher or pupil should fail to be interested or to persevere until the principles enunciated and demonstrated in the exercises are comprehended and fixed in the memory. Surely, the primary teacher and pupil who use this book, will gratefully remember its author and bless him as long as they may live for making primary arithmetic so plain, so attractive and so easy to be mastered.

THE CRUSADES; By George W. Cox, M. A., New York: Scribner, Armstrong & Co., 1875.

Another volume of the "Epochs of History," edited by Edward C. Morris, M. A., treating of that age of the world in which hundreds of thousands of men, women and children gave up their lives to rescue the Holy Sepulchre from the hands of the infidel. The story is well told; and presents the salient points in the history of the nine crusades. A general map of south-eastern Europe and Asia Minor for the era of the crusades, adds to the interest of the volume.

We again call the attention of our readers to this series, presenting in compact form and at light expense, a history of the world. As each volume is complete in itself, any particular epoch may be studied. For sale by Hadley Bros., 63 & 65 Washington St.

ROBINSON'S SHORTER COURSE. I. FIRST BOOK IN ARITHMETIC. II. COMPLETE ARITHMETIC. By Daniel W. Fish, A. M., New York and Chicago: Ivison, Blakeman, Taylor & Co. Edward Cook 133 and 135 State St. Chicago.

There is a completeness and perfection about these works that is decidedly useful. We conclude a pretty careful examination of them with the feeling that we have been in the presence of a great master. There seems to pervade them that high scholarship and authority which we can look up to and respect. The sunny, attractive pages of the *First Book* are full of solid merit. There is more of the modern method than we ever saw in one book. It does not seem to be the work of one man alone. You will find in it the choicest methods of our best teachers in public schools and Normal Schools, East and West. There is constant variety, relief, development. It grows and expands like an opening flower. It is a working book. The least possible space is given to explanations. The merit is that the development is so easy, so natural, that it explains itself. The mind of the child grows with the book.

The *Complete Arithmetic* begins and finishes the science of practical arithmetic. If there is any thing omitted we have not missed it. If there is any thing without a practical application to business accounts and the industry of life, we have not discovered it. And the beauty of the work is that the most natural and practical application is always given.

The most noticeable things are the very frequent *Mental* exercises; the excellent system of *Inductive* questions, paving the way to almost every subject; the rational treatment of *Ratio*; the elaborate work on *Percentage*;

and the very practical nature of the whole work. It is a *business Arithmetic*. Under *Measurements* we notice very full directions for use of all the industrial trades. *Land Measurements* and the methods of surveying and describing *government lands* are clearly explained. The work is eminently practical in all parts. Mr. Fish names this series "*Robinson's Shorter Course*." Educators will recognize in this an affectional tribute to the memory of the late Dr. Robinson. It is the tribute of ripe scholarship, and we believe it will be a noble and enduring monument.

LIPPINCOTT'S MAGAZINE.—The July number, beginning the sixteenth volume of Lippincott's, is really a gem. It possesses the usual characteristics of this delightful periodical, and has for its own share a very choice variety of entertaining reading. "May, in June," the illustrated paper of the number, is a description of the situation, accommodations, and general attractions of Cape May, the popular sea-shore summer resort of the fashionable society of the Middle and Southern States. The article is lucid and brilliant, and full of a quaint suggestive humor that reminds one of the New Hyperion papers which formerly appeared in Lippincott's Magazine. "Three Meetings" is a well-written sketch, which tells us how an aristocratic sportsman of the sentimental sort unexpectedly met, at three different times and places, a very charming and fascinating lady, how she impressed him, and what came of it. "The Yares of the Black Mountains," by Rebecca Harding Davis, is as finely and tenderly descriptive of the better feelings of the heart as it is of the wild, rugged scenery of the Black Mountain region, and is altogether a very readable paper. *Camp-Fire Lyric*, number three,—"Noonday Woods."—"Nipigon,"—is a very crisp, clear-cut, sparkling, and enjoyable lyric, truly and vividly descriptive of the aspect of nature it deals with, and loyal to the finest poetic touch and sentiment. "Searching for a Grave in a Strange Land," by Leonard Woolsey Bacon, is interesting as showing the scarcity of grave-room in several European countries, and as it discusses the laws relating thereto. Mr. Chauncey Hickox contributes a short, but a most intensely interesting and an extremely well-told story, called "The Romance of Birdseye," the most perfect thing in its way that we have read for many a day. Then follows the second and concluding part of "Eight Hundred Miles in an Ambulance," by Laura Winthrop Johnson. "Aunt Cindy's Dinner," by Sarah Winter Kellogg, is one of those vividly natural stories so characteristic of its author, which always gives the reader the impression that it is a matter of fact, of real life, and not a matter of fancy or fiction, he is reading about. Edward Howland contributes an able and an appreciative paper on "Montaigne." Miss Lazarus' poem "On the Proposal to Erect a Monument in England to Lord Byron," is a very finished and noble tribute to England's most luxuriant poetic genius. It closes with these lines:

He needs
No monument whose name and song and deeds
Are graven in all foreign hearts; but she,
His mother, England, slow and last to wake,
Needs raise the votive shaft for her fame's sake:
Hers is the shame if such forgotten be!

The first of Francis Asheton's two papers on "An Artist's Love," is well written and thoroughly entertaining. There is an interesting paper describing "A Night in a Swiss Pension," by T. Adolphus Trollope. "Lady Maud" is a fine poem, by Will Wallace Harney. R. E. Demby contributes a society sketch, which is quite enjoyable. "Our Monthly Gossip" has something to say about the "Reconstructed Louvre," "Keats's Tomb," and "A Wonderful Hair-dye." The literary criticism is marked with the usual ability and candor, and altogether the new volume opens with an air of freshness, vitality, and prosperity.

ST. NICHOLAS FOR JULY opens strongly and does not flag to the end. Its list of contributors is headed by three of the most popular female writers for Children—Rose Terry Cooke, Emily Huntington Miller and Louisa M. Alcott. The number has also one of the liveliest and most natural boys' stories that have appeared for months, written by Rossiter Johnson and entitled "A great specu-

lation." No true boy will fail to appreciate it. Then there is an article on "How to Make a Boat," which will doubtless set hammer and saw to going, and introduce to the waters of lake or river many a shapely craft, built by the same young hands and arms that man it. Our patriotic pride is awakened by the fine portraits and anecdotes of "American Orators," and the Fourth-of-July spirit is addressed by an historical sketch of the first naval battle in American waters one hundred years ago, and by the contrasted pictures of "Our Flag" then and now. The account by a Nebraska woman "How the Grasshoppers Came," thoroughly proves its authorship by the savor of reality in its vivid portrayal of the devastation and dismay which followed the coming of these small but destructive marauders. Susan Coolidge and Sarah O. Jewett contribute two capital stories for girls. The poems of the number are excellent; the illustrations are up to the usual standard of *ST. NICHOLAS*, which leaves nothing to be desired; and there are as many more attractions in the number as those we have mentioned.

OLD AND NEW.—Dr. Holland thus addresses "old and new" friends upon the occasion of the consolidation of that magazine with *Scribner*:

When a man has watched during a month for the coming of a friend, and, at last, a stranger has presented himself at the door, with the statement that he has come in that friend's place and on his behalf, the welcome is not apt to be very cordial. But if the stranger bears the news of the friend's death, and brings his last messages, with mementos and legacies, the door is thrown open, and he receives a hospitable welcome.

Well, *Old and New* is dead, and *Scribner* comes to you in its place. We do not expect you to find in the new magazine just what you have lost, but you will find the best that our friendship to you and to it has to give. *Old and New* was a good magazine. It was as pure as snow. It was strong in its discussion of vital questions, brave in its utterances, piquant in its stories, fresh in its verse, healthy and benevolent in its purposes, wise in its counsels, and elevating in its influences. It had a flavor of its own, derived mainly from its editor, and precisely this flavor we bring to you as its legacy. Mr. Hale, whose vitalities have made it what it has been, will be a contributor to *Scribner*. We have already arranged with him for a serial novel for the Centennial—not strictly historical, perhaps, but a story of our olden time—which will be read next year with special zest. You will meet in these pages with others of your old friends, and will find yourselves at home. You will at least be in communication with the wisest, brightest and best minds now tributary to our periodical literature, and have a magazine in your hands that has no aims beneath perfection.

WIDE AWAKE is the name of the New Illustrated Magazine for Girls and Boys, which D. Lothrop & Co., the enterprising Boston publishers, have started. The first number is a gem. In typographical beauty, in illustrations, and in literary matter, it is near perfection; while its price, \$2.00 per annum, will make it a favorite these hard times. Convenient in form, with a showy cover and fine plates, with stories and poems and instructive articles from well-known authors, with pages of music, and puzzles and familiar talk, it cannot fail to win public favor. Miss Ella Farman, author of "A White Hand," "A Little Woman," etc., is the editor, and Mrs. Louise Chandler Moulton, Miss Julia A. Eastman, George Macdonald, Dr. Tourjee, and many other well-known names are contributors. It will be a welcome visitor in every family circle.

TO TEACHERS.—Any teacher, lady or gentleman, desirous of visiting every place of historical or geographical note in the British Isles, the Continent, Palestine, Egypt and North Africa, including the Great Lakes, St. Lawrence, Hudson, Atlantic coast to Florida, with 10 days at Centennial Exposition,—one year's travel, route of 35,000 miles, company of 25 intelligent companions,—at an expense of one-third usual amount, address for circulars, Dr. E. W. Fish, 210 S. Water St., Chicago (care Chicago Dry Dock Co.) Teachers and students are desired as far as possible.